

SEQUENCE LISTING

<110> Tsuchiya, Masayuki
 Suzuki, Masami
 Yoshida, Kenji
 Fujii, Etsuko
 Matsubara, Kouichi
 Tsunoda, Hiroyuki

<120> ANTIBODIES AGAINST LESIONAL TISSUES

<130> 14875-144US1

<150> PCT/JP2003/014919

<151> 2003-11-21

<150> JP 2002-339241

<151> 2002-11-22

<160> 188

<170> PatentIn version 3.1

<210> 1

<211> 360

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)..(360)

<223>

<400> 1

cag gtg cag ctg gtg caa tct ggg gct gag gtg aag aag cct ggg gcc
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

48

tca gtg aag gtc tcc tgt cag gct tct gga tac atg ttc acc ggc ttc
 Ser Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Met Phe Thr Gly Phe
 20 25 30

96

tat atg cac tgg gtg cga cag gcc cct gga caa ggg ctt gag tgg atg
 Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

144

gga tgg atg aac act aac agt ggt gcc aca ggc tat gca cac aag ttt
 Gly Trp Met Asn Thr Asn Ser Gly Ala Thr Gly Tyr Ala His Lys Phe
 50 55 60

192

cag gac agg gtc acc ctg acc agg gac acg tcc atc agc aca ggc tac
 Gln Asp Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Gly Tyr
 65 70 75 80

240

atg gag ctg ggc ggc ctg aca tct gac gac acg gcc gtg tat tat tgt
 Met Glu Leu Gly Gly Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

288

gcg aga acc cag gag gtt tac tac tac gct atg gac gtc tgg ggc caa	336
Ala Arg Thr Gln Glu Val Tyr Tyr Ala Met Asp Val Trp Gly Gln	
100 105 110	

ggg cca atg gtc acc gtc tct tca	360
Gly Pro Met Val Thr Val Ser Ser	
115 120	

<210> 2
<211> 120
<212> PRT
<213> Homo sapiens

<400> 2	
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala	
1 5 10 15	

Ser Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Met Phe Thr Gly Phe	
20 25 30	

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met	
35 40 45	

Gly Trp Met Asn Thr Asn Ser Gly Ala Thr Gly Tyr Ala His Lys Phe	
50 55 60	

Gln Asp Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Gly Tyr	
65 70 75 80	

Met Glu Leu Gly Gly Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys	
85 90 95	

Ala Arg Thr Gln Glu Val Tyr Tyr Ala Met Asp Val Trp Gly Gln	
100 105 110	

Gly Pro Met Val Thr Val Ser Ser	
115 120	

<210> 3
<211> 366
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1)...(366)
<223>

<400> 3	
cag gtc cag ctg gtg caa tct gga gga ggc gtg gtc cag cct ggg agg	48
Gln Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Arg	
1 5 10 15	

tcc ctg aga ctc tcc tgt gca gcc tct gga ttc acc ttc agt agc aat	96
---	----

<210> 4
<211> 122
<212> PRT
<213> *Homo sapiens*

<400> 4
Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Asn
20 25 30

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Asp His Gly Leu Gly Asp Gln Ala Ser Trp Phe Asp Pro Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 5
 <211> 366
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1) .. (366)
 <223>

<400> 5
 cag gtc cag ctg gtg caa tct ggg gga ggc gtc gtc cag cct ggg agg 48
 Gln Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15
 tcc ctg aga ctc tcc tgt gca gcc tct gga ttc acc ttc agt agc aat 96
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Asn
 20 25 30
 ggc atg cac tgg gtc cgc cag gct cca ggc aag ggg ctg gag tgg gtc 144
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 gca gtt ata tgg tat gat gga agt aat aaa tac tat gca gac tcc gtc 192
 Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
 50 55 60
 aag ggc cga ttc acc atc tcc aga gac aat tcc aag aac aca ctg tat 240
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80
 ctg caa atg aac agc ctg aga gcc gag gac acg gct gtc tat tac tgt 288
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 gcg aga gat cac ggc ctt ggt gat caa gcc tcc tgg ttc gac ccc tgg 336
 Ala Arg Asp His Gly Leu Gly Asp Gln Ala Ser Trp Phe Asp Pro Trp
 100 105 110
 ggc cag gga acc ctg gtc acc gtc tcc tca
 Gly Gln Gly Thr Leu Val Thr Val Ser Ser 366
 115 120

<210> 6
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 6
 Gln Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Asn
 20 25 30

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Asp His Gly Leu Gly Asp Gln Ala Ser Trp Phe Asp Pro Trp
 100 105 110

Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 7

<211> 340

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)..(339)

<223>

<400> 7

cag gtg cag ctg gtg caa tct ggg gct gag gtg agg aag cct ggg acg 48
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Arg Lys Pro Gly Thr
 1 5 10 15

aca gtg aca atc tcc tgc aag gtt tct gga cac aac ttc atc gac cac 96
 Thr Val Thr Ile Ser Cys Lys Val Ser Gly His Asn Phe Ile Asp His
 20 25 30

tac atg cat tgg gta caa cag gcc cct gga aaa ggg ctt gac tgg atg 144
 Tyr Met His Trp Val Gln Gln Ala Pro Gly Lys Gly Leu Asp Trp Met
 35 40 45

gga cta att gac cct gaa gat ggt cag acg aaa tat tca gag agg ttt 192
 Gly Leu Ile Asp Pro Glu Asp Gly Gln Thr Lys Tyr Ser Glu Arg Phe
 50 55 60

gag ggc aga gtc aca att acc gcg gac aag tca aca gac aca acc tac 240
 Glu Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Asp Thr Thr Tyr
 65 70 75 80

ttg gag gtg agc ggc ctg aga tcg gaa gac acg gcc gtt tat ttc tgt 288
 Leu Glu Val Ser Gly Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys
 85 90 95

aca acg gac ttg ggt gac ttg aat tat tgg aac cct ggt cac cgt ctc 336
 Thr Thr Asp Leu Gly Asp Leu Asn Tyr Trp Asn Pro Gly His Arg Leu

100 105 110

ctc a 340
Leu

<210> 8
<211> 113
<212> PRT
<213> Homo sapiens

<400> 8
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Arg Lys Pro Gly Thr
1 5 10 15

Thr Val Thr Ile Ser Cys Lys Val Ser Gly His Asn Phe Ile Asp His
20 25 30

Tyr Met His Trp Val Gln Gln Ala Pro Gly Lys Gly Leu Asp Trp Met
35 40 45

Gly Leu Ile Asp Pro Glu Asp Gly Gln Thr Lys Tyr Ser Glu Arg Phe
50 55 60

Glu Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Asp Thr Thr Tyr
65 70 75 80

Leu Glu Val Ser Gly Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys
85 90 95

Thr Thr Asp Leu Gly Asp Leu Asn Tyr Trp Asn Pro Gly His Arg Leu
100 105 110

Leu

<210> 9
<211> 366
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1) .. (366)
<223>

<400> 9
cag gtc cag ctg gtg caa tct ggg gga ggc gtg gtc cag cct ggg agg 48
Gln Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

tcc ctg aga ctc tcc tgt gca gcc tct gga ttc acc ttc agt agc aat 96
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Asn
20 25 30

ggc atg cac tgg gtc cgc cag gct cca ggc aag ggg ctg gag tgg gtg	144
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val	
35 40 45	
gca gtt ata tgg tat gat gga agt aat aaa tac tat gca gac tcc gtg	192
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val	
50 55 60	
aag ggc cga ttc acc atc tcc aga gac aat tcc aag aac aca ctg tat	240
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr	
65 70 75 80	
ctg caa atg aac agc ctg aga gcc gag gac acg gct gtg tat tac tgt	288
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys	
85 90 95	
gcg aga gat cac ggc ctt ggt gat caa gcc tcc tgg ttc gac ccc tgg	336
Ala Arg Asp His Gly Leu Gly Asp Gln Ala Ser Trp Phe Asp Pro Trp	
100 105 110	
ggc cag gga acc ctg gtc acc gtc tcc tca	366
Gly Gln Gly Thr Leu Val Thr Val Ser Ser	
115 120	

<210> 10	
<211> 122	
<212> PRT	
<213> Homo sapiens	
<400> 10	
Gln Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Arg	
1 5 10 15	
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Asn	
20 25 30	
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val	
35 40 45	
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val	
50 55 60	
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr	
65 70 75 80	
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys	
85 90 95	
Ala Arg Asp His Gly Leu Gly Asp Gln Ala Ser Trp Phe Asp Pro Trp	
100 105 110	
Gly Gln Gly Thr Leu Val Thr Val Ser Ser	
115 120	

<210> 11

Gly Ile Ile Tyr Pro Gly Asp Ser Asp Ile Lys Tyr Ser Pro Ser Phe
 50 55 60

Gln Gly His Val Thr Ile Ser Ala Asp Thr Ser Met Asn Thr Ala Tyr
 65 70 75 80

Leu Gln Trp Asn Thr Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
 85 90 95

Ala Arg His Lys Gly Thr Arg Phe Gly Glu Val Leu Ala Val Gly Asn
 100 105 110

Trp Phe Asp Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120 125

<210> 13

<211> 368

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)..(366)

<223>

<400> 13

cag gtc cag ctg gtg caa tct ggg gct gag ttg aag acg cct ggg tcc 48
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Leu Lys Thr Pro Gly Ser
 1 5 10 15

tcg gtg aaa ttc tcc tgc aag gct tcc gga ggc agc ttc agc aac tat 96
 Ser Val Lys Phe Ser Cys Lys Ala Ser Gly Gly Ser Phe Ser Asn Tyr
 20 25 30

gct atc acc tgg gtg cga cag gcc cct gga caa ggt ctt gag tgg atg 144
 Ala Ile Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

gga agg atc atc cct atc ttt ggt ata cca aac tac gca cag gaa ttc 192
 Gly Arg Ile Ile Pro Ile Phe Gly Ile Pro Asn Tyr Ala Gln Glu Phe
 50 55 60

cag ggc aga gtc acg att acc gcc gac gat tcc acg acc aca gtc tac 240
 Gln Gly Arg Val Thr Ile Thr Ala Asp Asp Ser Thr Thr Val Tyr
 65 70 75 80

atg gaa ctg agc agc ctg aga tct gag gac acg gcc gtg tat tac tgt 288
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

gcg aga gat aat tca ata gga gca cct gat act tgg tgg ttc gac ccc 336
 Ala Arg Asp Asn Ser Ile Gly Ala Pro Asp Thr Trp Trp Phe Asp Pro
 100 105 110

tgg ggc cag gga cca cgg tca ccg tct cct ca 368

Trp Gly Gln Gly Pro Arg Ser Pro Ser Pro
 115 120

<210> 14
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 14
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Leu Lys Thr Pro Gly Ser
 1 5 10 15

Ser Val Lys Phe Ser Cys Lys Ala Ser Gly Gly Ser Phe Ser Asn Tyr
 20 25 30

Ala Ile Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Arg Ile Ile Pro Ile Phe Gly Ile Pro Asn Tyr Ala Gln Glu Phe
 50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Asp Ser Thr Thr Thr Val Tyr
 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Asp Asn Ser Ile Gly Ala Pro Asp Thr Trp Trp Phe Asp Pro
 100 105 110

Trp Gly Gln Gly Pro Arg Ser Pro Ser Pro
 115 120

<210> 15
 <211> 360
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1) .. (360)
 <223>

<400> 15
 cag gtc cag ctg gtg caa tct ggg gct gag gtg aag aag cct ggg gcc 48
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

tca gtg aag gtc tcc tgt cag gct tct gga tac atg ttc acc ggc ttc 96
 Ser Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Met Phe Thr Gly Phe
 20 25 30

tat atg cac tgg gtg cga cag gcc cct gga caa ggg ctt gag tgg atg 144
 Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

gga tgg atg aac act aac agt ggt gcc aca ggc tat gca cac aag ttt 192
 Gly Trp Met Asn Thr Asn Ser Gly Ala Thr Gly Tyr Ala His Lys Phe
 50 55 60

cag gac agg gtc acc ctg acc agg gac acg tcc atc agc aca ggc tac 240
 Gln Asp Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Gly Tyr
 65 70 75 80

atg gag ctg ggc ggc ctg aca tct gac gac acg gcc gtg tat tat tgt 288
 Met Glu Leu Gly Gly Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

gcg aga acc cag gag gtt tac tac tac gct atg gac gtc tgg ggc caa 336
 Ala Arg Thr Gln Glu Val Tyr Tyr Ala Met Asp Val Trp Gly Gln
 100 105 110

ggg aca atg gtc acc gtc tct tca 360
 Gly Thr Met Val Thr Val Ser Ser
 115 120

<210> 16
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 16
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Met Phe Thr Gly Phe
 20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Trp Met Asn Thr Asn Ser Gly Ala Thr Gly Tyr Ala His Lys Phe
 50 55 60

Gln Asp Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Gly Tyr
 65 70 75 80

Met Glu Leu Gly Gly Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Thr Gln Glu Val Tyr Tyr Ala Met Asp Val Trp Gly Gln
 100 105 110

Gly Thr Met Val Thr Val Ser Ser
 115 120

<210> 17
 <211> 365
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(363)
 <223>

<400> 17

cag	gtc	cag	ctg	gtg	caa	tct	ggg	gga	ggc	gtg	gtc	cag	cct	ggg	agg	48
Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Gly	Gly	Val	Val	Gln	Pro	Gly	Arg	
1			5				10					15				

tcc ctg aga ctc tcc tgt gca gcc tct gga ttc acc ttc agt agc aat

Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Ser	Asn	96
20							25					30				

ggc atg cac tgg gtc cgc cag gct cca ggc aag ggg ctg gag tgg gtg

Gly	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val	144
35							40			45						

gca gtt ata tgg tat gat gga agt aat aaa tac tat gca gac tcc gtg

Ala	Val	Ile	Trp	Tyr	Asp	Gly	Ser	Asn	Lys	Tyr	Tyr	Ala	Asp	Ser	Val	192
50							55			60						

aag ggc cga ttc acc atc tcc aga gac aat tcc aag aac aca ctg tat

Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Leu	Tyr	240
65							70			75			80			

ctg caa atg aac agc ctg agg gcc gag gac acg gct gtg tat tac tgt

Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	288
							85		90			95				

gcg aga gat cac ggc ctt ggt gat caa gcc tcc tgg ttc gac ccc tgg

Ala	Arg	Asp	His	Gly	Leu	Gly	Asp	Gln	Ala	Ser	Trp	Phe	Asp	Pro	Trp	336
100							105			110						

ggc cag gga acc ctg gtc acc gtc tcc tc

Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser								365
							115		120							

<210> 18
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 18

Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Gly	Val	Val	Gln	Pro	Gly	Arg	
1							5		10		15				

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Asn

			20				25				30				
--	--	--	----	--	--	--	----	--	--	--	----	--	--	--	--

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

			35				40			45					
--	--	--	----	--	--	--	----	--	--	----	--	--	--	--	--

Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val

			50				55			60					
--	--	--	----	--	--	--	----	--	--	----	--	--	--	--	--

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Asp His Gly Leu Gly Asp Gln Ala Ser Trp Phe Asp Pro Trp
 100 105 110

Gly Gln Gly Thr Leu Val Thr Val Ser
 115 120

<210> 19
 <211> 366
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(366)
 <223>

<400> 19
 cag gtc cag ctg gcg caa tct gga gga ggc gtg gtc cag cct ggg agg 48
 Gln Val Gln Leu Ala Gln Ser Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15
 tcc ctg aga ctc tcc tgt gca gcc tct gga ttc agc ttc agt agc tat 96
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr
 20 25 30
 ggc atg cac tgg gtc cgc cag gct cca ggc aag ggg ctg gag tgg gtg 144
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 gca gtt ata tgg tat gat gga agc tat aaa tac tat gca gaa tcc gtg 192
 Ala Val Ile Trp Tyr Asp Gly Ser Tyr Lys Tyr Tyr Ala Glu Ser Val
 50 55 60
 aag ggc cga ttc atc atc tcc aga gac aat tcc aag aac acc ctg tat 240
 Lys Gly Arg Phe Ile Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80
 ctg caa atg aac agc ctg aga gcc gag gac acg gct gtc tat tac tgt 288
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 gcg aga gat cgg ggg tcg gtg gag atg gct aca atc gcg gac tac tgg 336
 Ala Arg Asp Arg Gly Ser Val Glu Met Ala Thr Ile Ala Asp Tyr Trp
 100 105 110
 ggc cag gga acc ctg gtc acc gtc tcc tca 366
 Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 20
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 20
 Gln Val Gln Leu Ala Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr
 20 25 30
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ala Val Ile Trp Tyr Asp Gly Ser Tyr Lys Tyr Tyr Ala Glu Ser Val
 50 55 60
 Lys Gly Arg Phe Ile Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Asp Arg Gly Ser Val Glu Met Ala Thr Ile Ala Asp Tyr Trp
 100 105 110
 Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 21
 <211> 366
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(366)
 <223>

<400> 21
 cag gtc cag ctg gtg caa tct ggg gga ggc gtc gtg gtc cag cct ggg agg 48
 Gln Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15
 tcc ctg aga ctc tcc tgt gca gcc tct gga ttc agc ttc agt agc tat 96
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr
 20 25 30
 ggc atg cac tgg gtc cgc cag gct cca ggc aag ggg ctg gag tgg gtg 144
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 gca gtt ata tgg tat gat gga agt tat aaa tac tat gca gaa tcc gtg 192
 Ala Val Ile Trp Tyr Asp Gly Ser Tyr Lys Tyr Tyr Ala Glu Ser Val

50	55	60
----	----	----

aag ggc cga ttc atc atc tcc aga gac aat tcc aag aac acc ctg tat	240		
Lys Gly Arg Phe Ile Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr			
65	70	75	80

ctg caa atg aac agc ctg aga gcc gag gac acg gct gtg tat tac tgt	288		
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys			
85	90	95	

gcg aga gat cgg ggg tcg gta gag atg gct aca atc gcg gac tac tgg	336		
Ala Arg Asp Arg Gly Ser Val Glu Met Ala Thr Ile Ala Asp Tyr Trp			
100	105	110	

ggc cag gga acc ctg gtc acc gtc tcc tca	366	
Gly Gln Gly Thr Leu Val Thr Val Ser Ser		
115	120	

<210> 22

<211> 122

<212> PRT

<213> Homo sapiens

<400> 22

Gln Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Arg			
1	5	10	15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr			
20	25	30	

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val			
35	40	45	

Ala Val Ile Trp Tyr Asp Gly Ser Tyr Lys Tyr Tyr Ala Glu Ser Val			
50	55	60	

Lys Gly Arg Phe Ile Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr			
65	70	75	80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys			
85	90	95	

Ala Arg Asp Arg Gly Ser Val Glu Met Ala Thr Ile Ala Asp Tyr Trp			
100	105	110	

Gly Gln Gly Thr Leu Val Thr Val Ser Ser		
115	120	

<210> 23

<211> 366

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1) .. (366)

<223>

<400> 23					48
cag gtc cag ctg gtg caa tct ggg gga ggc gtc gtc cag cct ggg agg					
Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg					
1 5 10 15					
tcc ctg aga ctc tcc tgt gca gcc tct gga ttc agc ttc agt agc tat					96
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr					
20 25 30					
ggc atg cac tgg gtc cgc cag gct cca ggc aag ggg ctg gag tgg gtg					144
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val					
35 40 45					
gca gtt ata tgg tat gat gga agt tat aaa tac tat gca gaa tcc gtg					192
Ala Val Ile Trp Tyr Asp Gly Ser Tyr Lys Tyr Tyr Ala Glu Ser Val					
50 55 60					
aag ggc cga ttc atc atc tcc aga gac aat tcc aag aac acc ctg tat					240
Lys Gly Arg Phe Ile Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr					
65 70 75 80					
ctg caa atg aac agc ctg aga gcc gag gac acg gct gtc tat tac tgt					288
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys					
85 90 95					
gcg aga gat cgg ggg tcg gta gag atg gct aca atc gcg gac tac tgg					336
Ala Arg Asp Arg Gly Ser Val Glu Met Ala Thr Ile Ala Asp Tyr Trp					
100 105 110					
ggc cag gga acc ctg gtc acc gtc tcc tca					366
Gly Gln Gly Thr Leu Val Thr Val Ser Ser					
115 120					
<210> 24					
<211> 122					
<212> PRT					
<213> Homo sapiens					
<400> 24					
Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg					
1 5 10 15					
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr					
20 25 30					
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val					
35 40 45					
Ala Val Ile Trp Tyr Asp Gly Ser Tyr Lys Tyr Tyr Ala Glu Ser Val					
50 55 60					
Lys Gly Arg Phe Ile Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr					
65 70 75 80					

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Asp Arg Gly Ser Val Glu Met Ala Thr Ile Ala Asp Tyr Trp
 100 105 110

Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 25
 <211> 370
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(369)
 <223>

<400> 25
 cag gta cag ctg cag cag tca ggt cca gga ctg gtg aag ccc tcg cag 48
 Gln Val Gln Leu Gln Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
 1 5 10 15
 acc ctc tca ctc acc tgt gcc atc tcc ggg gac agt gtc tct agc aac 96
 Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn
 20 25 30
 agt gct gct tgg cac tgg atc agg cag tcc cca tcg aga ggc ctt gag 144
 Ser Ala Ala Trp His Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu
 35 40 45
 tgg ctg gga agg aca tac tac agg tcc aag tgg tat aat gat tat aca 192
 Trp Leu Gly Arg Thr Tyr Arg Ser Lys Trp Tyr Asn Asp Tyr Thr
 50 55 60
 gtg tct gtg aaa agt cga ata acc atc aag cca gac aca tcc aag aac 240
 Val Ser Val Lys Ser Arg Ile Thr Ile Lys Pro Asp Thr Ser Lys Asn
 65 70 75 80
 cag ttc tcc ctg cag ctg aac tct gtg act ccc gag gac acg gct gtg 288
 Gln Phe Ser Leu Gln Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val
 85 90 95
 tat tac tgt gca aga tca cag gaa gag cac cgg tcg ttg gat gat gct 336
 Tyr Tyr Cys Ala Arg Ser Gln Glu His Arg Ser Leu Asp Asp Ala
 100 105 110
 ttt gat atc tgg gac cac ggt cac cgt ctc ctc a 370
 Phe Asp Ile Trp Asp His Gly His Arg Leu Leu
 115 120

<210> 26
 <211> 123

<212> PRT

<213> Homo sapiens

<400> 26

Gln Val Gln Leu Gln Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
1 5 10 15Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn
20 25 30Ser Ala Ala Trp His Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu
35 40 45Trp Leu Gly Arg Thr Tyr Arg Ser Lys Trp Tyr Asn Asp Tyr Thr
50 55 60Val Ser Val Lys Ser Arg Ile Thr Ile Lys Pro Asp Thr Ser Lys Asn
65 70 75 80Gln Phe Ser Leu Gln Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val
85 90 95Tyr Tyr Cys Ala Arg Ser Gln Glu Glu His Arg Ser Leu Asp Asp Ala
100 105 110Phe Asp Ile Trp Asp His Gly His Arg Leu Leu
115 120

<210> 27

<211> 360

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)..(360)

<223>

<400> 27

cag gtc cag ctg gtg caa tct ggg gct gag gtg aag aag cct ggg gcc 48
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15tca gtg aag gtc tcc tgt cag gct tct gga tac atg ttc acc ggc ttc 96
Ser Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Met Phe Thr Gly Phe
20 25 30tat atg cac tgg gtg cga cag gcc cct gga caa ggg ctt gag tgg atg 144
Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45gga tgg atg aac act aac agt ggt gcc aca ggc tat gca cac aag ttt 192
Gly Trp Met Asn Thr Asn Ser Gly Ala Thr Gly Tyr Ala His Lys Phe
50 55 60

cag gac agg gtc acc ctg acc agg gac acg tcc atc agc aca ggc tac 240

Gln Asp Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Gly Tyr
 65 70 75 80

atg gag ctg ggc ggc ctg aca tct gac gac acg gcc gtg tat tat tgt 288
 Met Glu Leu Gly Gly Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

gcg aga acc cag gag gtt tac tac gct atg gac gtc tgg ggc caa 336
 Ala Arg Thr Gln Glu Val Tyr Tyr Ala Met Asp Val Trp Gly Gln
 100 105 110

ggg aca atg gtc acc gtc tct tca 360
 Gly Thr Met Val Thr Val Ser Ser
 115 120

<210> 28
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 28
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Met Phe Thr Gly Phe
 20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Trp Met Asn Thr Asn Ser Gly Ala Thr Gly Tyr Ala His Lys Phe
 50 55 60

Gln Asp Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Gly Tyr
 65 70 75 80

Met Glu Leu Gly Gly Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Thr Gln Glu Val Tyr Tyr Ala Met Asp Val Trp Gly Gln
 100 105 110

Gly Thr Met Val Thr Val Ser Ser
 115 120

<210> 29
 <211> 348
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1) .. (348)
 <223>

<400> 29
 cag gtc cag ctg gtg caa tct ggg gct gag gtg agg aag ccc ggg acg 48
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Arg Lys Pro Gly Thr
 1 5 10 15

aca gtg aca atc tcc tgc aag gtt tct gga cac aac ttc atc gac cac 96
 Thr Val Thr Ile Ser Cys Lys Val Ser Gly His Asn Phe Ile Asp His
 20 25 30

tac atg cat tgg gta caa cag gcc cct gga aaa ggg ctt gac tgg atg 144
 Tyr Met His Trp Val Gln Gln Ala Pro Gly Lys Gly Leu Asp Trp Met
 35 40 45

gga cta att gac cct gaa gat ggt cag acg aaa tat tca gag agg ttt 192
 Gly Leu Ile Asp Pro Glu Asp Gly Gln Thr Lys Tyr Ser Glu Arg Phe
 50 55 60

gag ggc aga gtc aca att acc gcg gac aag tca aca gac aca acc tac 240
 Glu Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Asp Thr Thr Tyr
 65 70 75 80

ttg gag gtg agc ggc ctg aga tcg gaa gac acg gcc gtt tat ttc tgt 288
 Leu Glu Val Ser Gly Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys
 85 90 95

aca acg gac ttg ggt gac ttg aat tat tgg ggc cag gga acc ctg gtc 336
 Thr Thr Asp Leu Gly Asp Leu Asn Tyr Trp Gly Gln Gly Thr Leu Val
 100 105 110

acc gtc tcc tca 348
 Thr Val Ser Ser
 115

<210> 30
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 30
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Arg Lys Pro Gly Thr 15
 1 5 10 15

Thr Val Thr Ile Ser Cys Lys Val Ser Gly His Asn Phe Ile Asp His
 20 25 30

Tyr Met His Trp Val Gln Gln Ala Pro Gly Lys Gly Leu Asp Trp Met
 35 40 45

Gly Leu Ile Asp Pro Glu Asp Gly Gln Thr Lys Tyr Ser Glu Arg Phe
 50 55 60

Glu Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Asp Thr Thr Tyr
 65 70 75 80

Leu Glu Val Ser Gly Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys
 85 90 95

Thr Thr Asp Leu Gly Asp Leu Asn Tyr Trp Gly Gln Gly Thr Leu Val
 100 105 110

Thr Val Ser Ser
 115

<210> 31
 <211> 366
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(366)
 <223>

<400> 31
 cag gtc cag ctg gtg caa tct ggg gga ggc gtg gtc cag cct ggg agg 48
 Gln Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15

tcc ctg aga ctc tcc tgt gca gcc tct gga ttc acc ttc agt agc aat 96
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Asn
 20 25 30

ggc atg cac tgg gtc cgc cag gct cca ggc aag ggg ctg gag tgg gtg 144
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

gca gtt ata tgg tat gat gga agt aat aaa tac tat gca gac tcc gtg 192
 Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
 50 55 60

aag ggc cga ttc acc atc tcc aga gac aat tcc aag aac aca ctg tat 240
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80

ctg caa atg aac agc ctg aga gcc gag gac acg gct gtg tat tac tgt 288
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

gcg aga gat cac ggc ctt ggt gat caa gcc tcc tgg ttc gac ccc tgg 336
 Ala Arg Asp His Gly Leu Gly Asp Gln Ala Ser Trp Phe Asp Pro Trp
 100 105 110

ggc cag ggc acc ctg gtc acc gtc tcc tca
 Gly Gln Gly Thr Leu Val Thr Val Ser Ser 366
 115 120

<210> 32
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 32
 Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Asn
 20 25 30
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Asp His Gly Leu Gly Asp Gln Ala Ser Trp Phe Asp Pro Trp
 100 105 110
 Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 33
 <211> 368
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(366)
 <223>

<400> 33
 cag gtc cag ctg gtg caa tct ggg gct gag gtg aag aag tct ggg gcc 48
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Ser Gly Ala
 1 5 10 15
 tca gtg aag gtc tcc tgc aag gct tct gga tac acc ttc acc ggc cac 96
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly His
 20 25 30
 ttt atc cac tgg gtg cgg cag gcc cct gga caa ggg ctt gag tgg atg 144
 Phe Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 gga tgg atc aac cct aac gtt ggt gtc aca aat tat gca cag aag ttt 192
 Gly Trp Ile Asn Pro Asn Val Gly Val Thr Asn Tyr Ala Gln Lys Phe
 50 55 60
 cag ggc agg gtc acc atg acc agg gac acg tcc ata agc aca gcc tac 240
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
 65 70 75 80

ata gaa ctg agg agg ctg aga tct gac gac acg gcc gtg tat tac tgt	288
Ile Glu Leu Arg Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys	
85 90 95	
gtg aga gaa tcc gac aca gct gcg gtg gcc tac tac tac cac ggt atg	336
Val Arg Glu Ser Asp Thr Ala Ala Val Ala Tyr Tyr Tyr His Gly Met	
100 105 110	
gac gtc tgg gga caa tgg tca ccg tct ctt ca	368
Asp Val Trp Gly Gln Trp Ser Pro Ser Leu	
115 120	
<210> 34	
<211> 122	
<212> PRT	
<213> Homo sapiens	
<400> 34	
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Ser Gly Ala	
1 5 10 15	
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly His	
20 25 30	
Phe Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met	
35 40 45	
Gly Trp Ile Asn Pro Asn Val Gly Val Thr Asn Tyr Ala Gln Lys Phe	
50 55 60	
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr	
65 70 75 80	
Ile Glu Leu Arg Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys	
85 90 95	
Val Arg Glu Ser Asp Thr Ala Ala Val Ala Tyr Tyr Tyr His Gly Met	
100 105 110	
Asp Val Trp Gly Gln Trp Ser Pro Ser Leu	
115 120	
<210> 35	
<211> 375	
<212> DNA	
<213> Homo sapiens	
<220>	
<221> CDS	
<222> (1)..(375)	
<223>	
<400> 35	
cag gtc cag ctg gtg caa tct ggg gga gac tgg gta aag cct ggg ggg	48
Gln Val Gln Leu Val Gln Ser Gly Gly Asp Trp Val Lys Pro Gly Gly	

1	5	10	15													
tcc	ctt	aga	ctc	tcc	tgt	gca	gcg	tct	gga	ttc	cct	ttc	gct	aat	gcc	96
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Pro	Phe	Ala	Asn	Ala	
20								25					30			
tgg	atg	tat	tgg	ttc	cgc	cag	gct	cca	ggg	aag	ggg	ctg	gag	tgg	gtt	144
Trp	Met	Tyr	Trp	Phe	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val	
35								40				45				
ggc	cgt	att	aaa	agc	aaa	cca	agt	ggg	gct	aca	gag	ttc	gct	gca	192	
Gly	Arg	Ile	Lys	Ser	Lys	Pro	Ser	Gly	Gly	Ala	Thr	Glu	Phe	Ala	Ala	
50								55			60					
ccc	gtg	gaa	ggt	aga	ttc	agc	atc	tcc	aga	gac	gat	tcg	aaa	aac	acg	240
Pro	Val	Glu	Gly	Arg	Phe	Ser	Ile	Ser	Arg	Asp	Asp	Ser	Lys	Asn	Thr	
65								70			75		80			
atg	gat	ctg	caa	atg	aat	agc	ctg	aga	acc	gac	aca	gcc	gta	tat	288	
Met	Asp	Leu	Gln	Met	Asn	Ser	Leu	Arg	Thr	Asp	Asp	Thr	Ala	Val	Tyr	
85								90				95				
tat	tgt	acc	aca	gat	tgg	ggt	tcg	ggg	acc	tat	cat	aag	ttt	gct	tta	336
Tyr	Cys	Thr	Asp	Trp	Gly	Ser	Gly	Thr	Tyr	His	Lys	Phe	Ala	Leu		
100								105			110					
gat	gtc	tgg	ggc	caa	ggg	aca	atg	gtc	acc	gtc	tct	tca			375	
Asp	Val	Trp	Gly	Gln	Gly	Thr	Met	Val	Thr	Val	Ser	Ser				
115								120			125					

<210> 36
<211> 125
<212> PRT
<213> Homo sapiens

<400> 36
Gln Val Gln Leu Val Gln Ser Gly Gly Asp Trp Val Lys Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Pro Phe Ala Asn Ala
20 25 30

Trp Met Tyr Trp Phe Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Gly Arg Ile Lys Ser Lys Pro Ser Gly Gly Ala Thr Glu Phe Ala Ala
50 55 60

Pro Val Glu Gly Arg Phe Ser Ile Ser Arg Asp Asp Ser Lys Asn Thr
65 70 75 80

Met Asp Leu Gln Met Asn Ser Leu Arg Thr Asp Asp Thr Ala Val Tyr
85 90 95

Tyr Cys Thr Thr Asp Trp Gly Ser Gly Thr Tyr His Lys Phe Ala Leu
100 105 110

Asp Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser
 115 120 125

<210> 37
 <211> 357
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(357)
 <223>

<400> 37
 gtg cag ctg gtg caa tct ggg gct gag gtg aag aag cct ggg gcc tca 48
 Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser
 1 5 10 15
 gtg aag gtc tcc tgt cag gct tct gga tac atg ttc acc ggc ttc tat 96
 Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Met Phe Thr Gly Phe Tyr
 20 25 30
 atg cac tgg gtg cga cag gcc cct gga caa ggg ctt gag tgg atg gga 144
 Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly
 35 40 45
 tgg atg aac act aac agt ggt gcc aca ggc tat gca cac aag ttt cag 192
 Trp Met Asn Thr Asn Ser Gly Ala Thr Gly Tyr Ala His Lys Phe Gln
 50 55 60
 gac agg gtc acc ctg acc agg gac acg tcc atc agc aca ggc tac atg 240
 Asp Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Gly Tyr Met
 65 70 75 80
 gag ctg ggc ggc ctg aca tct gac gac acg gcc gtg tat tat tgt gcg 288
 Glu Leu Gly Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95
 aga acc cag gag gtt tac tac tac gct atg gac gtc tgg ggc caa ggg 336
 Arg Thr Gln Glu Val Tyr Tyr Ala Met Asp Val Trp Gly Gln Gly
 100 105 110
 aca atg gtc acc gtc tct tca 357
 Thr Met Val Thr Val Ser Ser
 115

<210> 38
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 38
 Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser
 1 5 10 15

Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Met Phe Thr Gly Phe Tyr
 20 25 30

Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly
 35 40 45

Trp Met Asn Thr Asn Ser Gly Ala Thr Gly Tyr Ala His Lys Phe Gln
 50 55 60

Asp Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Gly Tyr Met
 65 70 75 80

Glu Leu Gly Gly Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95

Arg Thr Gln Glu Val Tyr Tyr Ala Met Asp Val Trp Gly Gln Gly
 100 105 110

Thr Met Val Thr Val Ser Ser
 115

<210> 39
 <211> 360
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(360)
 <223>

<400> 39
 cag gtg cag ctg gtg caa tct ggg gct gag gtg aag aag cct ggg gcc 48
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

tca gtg aag gtc tcc tgt cag gct tct gga tac atg ttc acc ggc ttc 96
 Ser Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Met Phe Thr Gly Phe
 20 25 30

tat atg cac tgg gtg cga cag gcc cct gga caa ggg ctt gag tgg atg 144
 Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

gga tgg atg aac act aac agt ggt gcc aca ggc tat gca cac aag ttt 192
 Gly Trp Met Asn Thr Asn Ser Gly Ala Thr Gly Tyr Ala His Lys Phe
 50 55 60

cag gac agg gtc acc ctg acc agg gac acg tcc atc agc aca ggc tac 240
 Gln Asp Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Gly Tyr
 65 70 75 80

atg gag ctg ggc ggc ctg aca tct gac gac acg gcc gtg tat tat tgt 288
 Met Glu Leu Gly Gly Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

gcg	aga	acc	cag	gag	gtt	tac	tac	tac	gct	atg	gac	gtc	tgg	ggc	caa	336	
Ala	Arg	Thr	Gln	Glu	Val	Tyr	Tyr	Tyr	Ala	Met	Asp	Val	Trp	Gly	Gln		
100															110		
ggg	aca	atg	gtc	acc	gtc	tct	tca									360	
Gly	Thr	Met	Val	Thr	Val	Ser	Ser										
115															120		
<210> 40																	
<211> 120																	
<212> PRT																	
<213> Homo sapiens																	
<400> 40																	
Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala		
1															15		
Ser	Val	Lys	Val	Ser	Cys	Gln	Ala	Ser	Gly	Tyr	Met	Phe	Thr	Gly	Phe		
20															30		
Tyr	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Met		
35															45		
Gly	Trp	Met	Asn	Thr	Asn	Ser	Gly	Ala	Thr	Gly	Tyr	Ala	His	Lys	Phe		
50															60		
Gln	Asp	Arg	Val	Thr	Leu	Thr	Arg	Asp	Thr	Ser	Ile	Ser	Thr	Gly	Tyr		
65															80		
Met	Glu	Leu	Gly	Gly	Leu	Thr	Ser	Asp	Asp	Thr	Ala	Val	Tyr	Tyr	Cys		
85															95		
Ala	Arg	Thr	Gln	Glu	Val	Tyr	Tyr	Ala	Met	Asp	Val	Trp	Gly	Gln			
100															110		
Gly	Thr	Met	Val	Thr	Val	Ser	Ser										
115															120		
<210> 41																	
<211> 360																	
<212> DNA																	
<213> Homo sapiens																	
<220>																	
<221> CDS																	
<222> (1)..(360)																	
<223>																	
<400> 41																	
cag	gtc	cag	ctg	gtg	caa	tct	ggg	gct	gag	gcg	aag	aag	cct	ggg	gcc	48	
Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Ala	Lys	Lys	Pro	Gly	Ala		
1															15		
tca	gtg	aag	gtc	tcc	tgt	cag	gct	tct	gga	tac	atg	ttc	acc	ggc	ttc	96	

Ser Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Met Phe Thr Gly Phe					
20	25	30			
tat atg cac tgg gtg cga cag gcc cct gga caa ggg ctt gag tgg atg					144
Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met					
35	40	45			
gga tgg atg aac act aac agt ggt gcc aca ggc tat gca cac aag ttt					192
Gly Trp Met Asn Thr Asn Ser Gly Ala Thr Gly Tyr Ala His Lys Phe					
50	55	60			
cag gac agg gtc acc ctg acc agg gac acg tcc atc agc aca ggc tac					240
Gln Asp Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Gly Tyr					
65	70	75	80		
atg gag ctg ggc ggc ctg aca tct gac gac acg gcc gtg tat tat tgt					288
Met Glu Leu Gly Gly Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys					
85	90	95			
gcg aga acc cag gag gtt tac tac tac gct atg gac gtc tgg ggc caa					336
Ala Arg Thr Gln Glu Val Tyr Tyr Ala Met Asp Val Trp Gly Gln					
100	105	110			
ggg acc acg gtc acc gtc tcc tca					360
Gly Thr Thr Val Thr Val Ser Ser					
115	120				
<210> 42					
<211> 120					
<212> PRT					
<213> Homo sapiens					
<400> 42					
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Ala Lys Lys Pro Gly Ala					
1	5	10	15		
Ser Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Met Phe Thr Gly Phe					
20	25	30			
Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met					
35	40	45			
Gly Trp Met Asn Thr Asn Ser Gly Ala Thr Gly Tyr Ala His Lys Phe					
50	55	60			
Gln Asp Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Gly Tyr					
65	70	75	80		
Met Glu Leu Gly Gly Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys					
85	90	95			
Ala Arg Thr Gln Glu Val Tyr Tyr Ala Met Asp Val Trp Gly Gln					
100	105	110			
Gly Thr Thr Val Thr Val Ser Ser					
115	120				

<210> 43
 <211> 369
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(369)
 <223>

<400> 43
 cag gtc cag ctg gtg caa tct ggg gga ggc ttg gta cag cca ggg cg 48
 Gln Val Gln Leu Val Gln Ser Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 tcc ctg aga ctc tcc tgt aca act tct gga ttc acc ttt agt gat tat 96
 Ser Leu Arg Leu Ser Cys Thr Ser Gly Phe Thr Phe Ser Asp Tyr
 20 25 30
 gct ttg agc tgg gtc cgc cag gct cca ggg agg ggg ctg gag tgg gta 144
 Ala Leu Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Val
 35 40 45
 ggt ttc att aga aat aaa att tat ggt ggg aca aca gat tac gcc gca 192
 Gly Phe Ile Arg Asn Lys Ile Tyr Gly Gly Thr Thr Asp Tyr Ala Ala
 50 55 60
 tct gtg aaa ggc aga ttc acc atc tca aga gat gat tcc aaa agt atc 240
 Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ile
 65 70 75 80
 gcc tat ctg caa atg aac agc ctg aaa acc gag gac tca gcc gtc tat 288
 Ala Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Ser Ala Val Tyr
 85 90 95
 tac tgt act aga gat tcg ggt gtg act gct gcc tac ttt gac tac 336
 Tyr Cys Thr Arg Asp Ser Gly Val Val Thr Ala Ala Tyr Phe Asp Tyr
 100 105 110
 tgg ggc cag ggc acc ctg gtc acc gtc tcc tca 369
 Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 44
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 44
 Gln Val Gln Leu Val Gln Ser Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Thr Thr Ser Gly Phe Thr Phe Ser Asp Tyr
 20 25 30

Ala Leu Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Val
 35 40 45

Gly Phe Ile Arg Asn Lys Ile Tyr Gly Gly Thr Thr Asp Tyr Ala Ala
 50 55 60

Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ile
 65 70 75 80

Ala Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Ser Ala Val Tyr
 85 90 95

Tyr Cys Thr Arg Asp Ser Gly Val Val Thr Ala Ala Tyr Phe Asp Tyr
 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 45

<211> 366

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)..(366)

<223>

<400> 45

cag gtc cag ctg gtg caa tct ggg gga ggc gtg gtc cag cct ggg agg 48
 Gln Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15

tcc ctg aga ctc tcc tgt gca gcc tct gga ttc acc ttc agt agc aat 96
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Asn
 20 25 30

ggc atg cac tgg gtc cgc cag gct cca ggc aag ggg ctg gag tgg gtg 144
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

gca gtt ata tgg tat gat gga agt aat aaa tac tat gca gac tcc gtg 192
 Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
 50 55 60

aag ggc cga ttc acc atc tcc aga gac aat tcc aag aac aca ctg tat 240
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80

ctg caa atg aac agc ctg aga gcc gag gac acg gct gtg tat tac tgt 288
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

gcg aga gat cac ggc ctt ggt gat caa gcc tcc tgg ttc gac ccc tgg 336
 Ala Arg Asp His Gly Leu Gly Asp Gln Ala Ser Trp Phe Asp Pro Trp

100

105

110

ggc cag ggg acc acg gtc acc gtc tcc tca 366
 Gly Gln Gly Thr Thr Val Thr Val Ser Ser
 115 120

<210> 46
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 46
 Gln Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Asn
 20 25 30

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Asp His Gly Leu Gly Asp Gln Ala Ser Trp Phe Asp Pro Trp
 100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser
 115 120

<210> 47
 <211> 360
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(360)
 <223>

<400> 47
 cag gtc cag ctg gtg caa tct ggg gct gag gtg aag aag cct ggg gcc 48
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

tca gtg aag gtc tcc tgt cag gct tct gga tac atg ttc acc ggc ttc 96
 Ser Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Met Phe Thr Gly Phe
 20 25 30

tat atg cac tgg gtg cga cag gcc cct gga caa ggg ctt gag tgg atg	144
Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met	
35 40 45	
gga tgg atg aac act aac agt qgt gcc aca ggc tat gca cac aag ttt	192
Gly Trp Met Asn Thr Asn Ser Gly Ala Thr Gly Tyr Ala His Lys Phe	
50 55 60	
cag gac agg gtc acc ctg acc agg gac acg tcc atc agc aca ggc tac	240
Gln Asp Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Gly Tyr	
65 70 75 80	
atg gag ctg ggc ctg aca tct gac gac acg gcc gtg tat tat tgt	288
Met Glu Leu Gly Gly Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys	
85 90 95	
gcg aga acc cag gag gtt tac tac tac gct atg gac gtc tgg ggc caa	336
Ala Arg Thr Gln Glu Val Tyr Tyr Ala Met Asp Val Trp Gly Gln	
100 105 110	
ggg aca atg gtc acc gtc tct tca	360
Gly Thr Met Val Thr Val Ser Ser	
115 120	

<210> 48	
<211> 120	
<212> PRT	
<213> Homo sapiens	
<400> 48	
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala	
1 5 10 15	
Ser Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Met Phe Thr Gly Phe	
20 25 30	
Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met	
35 40 45	
Gly Trp Met Asn Thr Asn Ser Gly Ala Thr Gly Tyr Ala His Lys Phe	
50 55 60	
Gln Asp Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Gly Tyr	
65 70 75 80	
Met Glu Leu Gly Gly Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys	
85 90 95	
Ala Arg Thr Gln Glu Val Tyr Tyr Ala Met Asp Val Trp Gly Gln	
100 105 110	
Gly Thr Met Val Thr Val Ser Ser	
115 120	

<210> 49

<211> 353
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(351)
 <223>

<400> 49
 cag ctg gtg caa tct ggg gct gag gtg aag aag cct ggg gcc tca gtg 48
 Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val
 1 5 10 15
 aag gtc tcc tgt cag gct tct gga tac atg ttc acc ggc ttc tat atg 96
 Lys Val Ser Cys Gln Ala Ser Gly Tyr Met Phe Thr Gly Phe Tyr Met
 20 25 30
 cac tgg gtg cga cag gcc cct gga caa ggg ctt gag tgg atg gga tgg 144
 His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Trp
 35 40 45
 atg aac act aac agt ggt gcc aca ggc tat gca cac aag ttt cag gac 192
 Met Asn Thr Asn Ser Gly Ala Thr Gly Tyr Ala His Lys Phe Gln Asp
 50 55 60
 agg gtc acc ctg acc agg gac acg tcc atc agc aca ggc tac atg gag 240
 Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Gly Tyr Met Glu
 65 70 75 80
 ctg ggc ggc ctg aca tct gac gac acg gcc gtg tat tat tgt gcg aga 288
 Leu Gly Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
 85 90 95
 acc cag gag gtt tac tac tac gct atg gac gtc tgg ggc caa ggg aca 336
 Thr Gln Glu Val Tyr Tyr Ala Met Asp Val Trp Gly Gln Gly Thr
 100 105 110
 atg gtc acc gtc tct tc 353
 Met Val Thr Val Ser
 115

<210> 50
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 50
 Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val
 1 5 10 15
 Lys Val Ser Cys Gln Ala Ser Gly Tyr Met Phe Thr Gly Phe Tyr Met
 20 25 30
 His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Trp
 35 40 45

Met Asn Thr Asn Ser Gly Ala Thr Gly Tyr Ala His Lys Phe Gln Asp
 50 55 60

Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Gly Tyr Met Glu
 65 70 75 80

Leu Gly Gly Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
 85 90 95

Thr Gln Glu Val Tyr Tyr Ala Met Asp Val Trp Gly Gln Gly Thr
 100 105 110

Met Val Thr Val Ser
 115

<210> 51
 <211> 360
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(360)
 <223>

<400> 51
 cag gtc cag ctg gtg caa tct ggg gct gag gtg aag aag cct ggg gcc 48
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

tca gtg aag gtc tcc tgt cag gct tct gga tac atg ttc acc ggc ttc 96
 Ser Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Met Phe Thr Gly Phe
 20 25 30

tat atg cac tgg gtg cga cag gcc cct gga caa ggg ctt gag tgg atg 144
 Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

gga tgg atg aac act aac agt ggt gcc aca ggc tat gca cac aag ttt 192
 Gly Trp Met Asn Thr Asn Ser Gly Ala Thr Gly Tyr Ala His Lys Phe
 50 55 60

cag gac agg gtc acc ctg acc agg gac acg tcc atc agc aca ggc tac 240
 Gln Asp Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Gly Tyr
 65 70 75 80

atg gag ctg ggc ctg aca tct gac gac acg gcc gtg tat tat tgt 288
 Met Glu Leu Gly Gly Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

gcg aga acc cag gag gtt tac tac tac gct atg gac gtc tgg ggc caa 336
 Ala Arg Thr Gln Glu Val Tyr Tyr Ala Met Asp Val Trp Gly Gln
 100 105 110

gga acc ctg gtc acc gtc tct tca 360

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 52
<211> 120
<212> PRT
<213> Homo sapiens

<400> 52
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Met Phe Thr Gly Phe
20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Trp Met Asn Thr Asn Ser Gly Ala Thr Gly Tyr Ala His Lys Phe
50 55 60

Gln Asp Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Gly Tyr
65 70 75 80

Met Glu Leu Gly Gly Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Thr Gln Glu Val Tyr Tyr Ala Met Asp Val Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 53
<211> 357
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1)..(357)
<223>

<400> 53
gtc cag ctg gtg caa tct ggg gct gag gtg aag aag cct ggg gcc tca 48
Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser
1 5 10 15

gtg aag gtc tcc tgt cag gct tct gga tac atg ttc acc ggc ttc tat 96
Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Met Phe Thr Gly Phe Tyr
20 25 30

atg cac tgg gtg cga cag gcc cct gga caa ggg ctt gag tgg atg gga 144
Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly
35 40 45

tgg atg aac act aac agt ggt gcc aca ggc tat gca cac aag ttt cag	192
Trp Met Asn Thr Asn Ser Gly Ala Thr Gly Tyr Ala His Lys Phe Gln	
50 55 60	

gac agg gtc acc ctg acc agg gac acg tcc atc agc aca ggc tac atg	240
Asp Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Gly Tyr Met	
65 70 75 80	

gag ctg ggc ggc ctg aca tct gac gac acg gcc gtg tat tat tgt gcg	288
Glu Leu Gly Gly Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala	
85 90 95	

aga acc cag gag gtt tac tac tac gct atg gac gta ctg ggg cca agg	336
Arg Thr Gln Glu Val Tyr Tyr Ala Met Asp Val Leu Gly Pro Arg	
100 105 110	

gac aat ggt cac cgt ctc ttc	357
Asp Asn Gly His Arg Leu Phe	
115	

<210> 54
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 54	
Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser	
1 5 10 15	

Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Met Phe Thr Gly Phe Tyr	
20 25 30	

Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly	
35 40 45	

Trp Met Asn Thr Asn Ser Gly Ala Thr Gly Tyr Ala His Lys Phe Gln	
50 55 60	

Asp Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Gly Tyr Met	
65 70 75 80	

Glu Leu Gly Gly Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala	
85 90 95	

Arg Thr Gln Glu Val Tyr Tyr Ala Met Asp Val Leu Gly Pro Arg	
100 105 110	

Asp Asn Gly His Arg Leu Phe	
115	

<210> 55
 <211> 342
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(342)
 <223>

 <400> 55
 gat att gtg atg acc cag act cca gac tcc ctg gct gtg tct ctg ggc 48
 Asp Ile Val Met Thr Gln Thr Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15

 gag agg gcc acc atc aac tgc aag tcc agc cag agt gtt tta tac agc 96
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
 20 25 30

 tcc aac aat aag aac tac tta gct tgg tac cag cag aaa cca gga cag 144
 Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45

 cct cct aaa ctg ctc att tac tgg gca tct acc cgg gaa tcc ggg gtc 192
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
 50 55 60

 cct gac cga ttc agt ggc agc ggg tct ggg aca gat ttc act ctc acc 240
 Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80

 atc agc acc ctg cag gct gaa gat gtg gca gtt tat tac tgt cag caa 288
 Ile Ser Thr Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95

 tat tat agt act cct ccg acg ttc ggc caa ggg acc aag gtg gaa atc 336
 Tyr Tyr Ser Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 100 105 110

 aaa cgt 342
 Lys Arg

<210> 56
 <211> 114
 <212> PRT
 <213> Homo sapiens

 <400> 56
 Asp Ile Val Met Thr Gln Thr Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15

 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
 20 25 30

 Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45

 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
 50 55 60

Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80

Ile Ser Thr Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95

Tyr Tyr Ser Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 100 105 110

Lys Arg

<210> 57

<211> 337

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)..(336)

<223>

<400> 57

gat ctt gtg atg act cag tct cca gac tcc ctg gct gtg tct ctg ggc 48
 Asp Leu Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15

gag agg gcc acc atc aac tgc aag tcc agc cag agt gtt tta tac agc 96
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
 20 25 30

tcc aac aat aag aac tac tta gct tgg cac cag cag aaa cca gga cag 144
 Ser Asn Asn Lys Asn Tyr Leu Ala Trp His Gln Gln Lys Pro Gly Gln
 35 40 45

cct cct aaa ctg ctc att tac tgg gca tct acc cgg gaa tcc ggg gtc 192
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
 50 55 60

cct gac cga ttc agt ggc agc ggg tct ggg aca gat ttc act ctc acc 240
 Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80

atc agc acc ctg cag gct gaa gat gtg gca gtt tat tac tgt cag caa 288
 Ile Ser Thr Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95

tat tat agt act cct ccg acg ttc ggc caa ggg acc aaa gtg gat atc a 337
 Tyr Tyr Ser Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Asp Ile
 100 105 110

<210> 58

<211> 112

<212> PRT

<213> Homo sapiens

<400> 58

Asp Leu Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
20 25 30

Ser Asn Asn Lys Asn Tyr Leu Ala Trp His Gln Gln Lys Pro Gly Gln
35 40 45

Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60

Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

Ile Ser Thr Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
85 90 95

Tyr Tyr Ser Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Asp Ile
100 105 110

<210> 59

<211> 342

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)..(342)

<223>

<400> 59

gat att gtg atg act cag tct cca gac tcc ctg gct gtg tct ctg ggc 48
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15

gag agg gcc acc atc aac tgc aag tcc agc cag agt gtt tta tac agc 96
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
20 25 30

tcc aac aat aag aac tac tta gct tgg tac cag cag aaa cca gga cag 144
Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45

cct cct aaa ctg ctc att tac tgg gca tct acc cgg gaa tcc ggg gtc 192
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60

cct gac cga ttc agt ggc agc ggg tct ggg aca gat ttc act ctc acc 240
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

atc agc acc ctg cag gct gaa gat gtg gca gtt tat tac tgt cag caa 288

Ile Ser Thr Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln			
85	90	95	
tat tat agt act cct ccg acg ttc ggc caa ggg acc aag gtg gaa atc			336
Tyr Tyr Ser Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile			
100	105	110	
aaa cgt			342
Lys Arg			

<210> 60			
<211> 114			
<212> PRT			
<213> Homo sapiens			
<400> 60			
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly			
1	5	10	15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser			
20	25	30	
Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln			
35	40	45	
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val			
50	55	60	
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr			
65	70	75	80
Ile Ser Thr Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln			
85	90	95	
Tyr Tyr Ser Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile			
100	105	110	
Lys Arg			

<210> 61			
<211> 342			
<212> DNA			
<213> Homo sapiens			
<220>			
<221> CDS			
<222> (1) .. (342)			
<223>			
<400> 61			
gat att gtg atg act cag tct cca ctc tcc ctg ccc gtc acc cct gga			48
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly			
1	5	10	15

gag ccg gcc tcc atc tcc tgc agg tct agt cag agc ctc ttg gat agt	96
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Asp Ser	
20 25 30	
gat gat gga aac acc tat ttg gac tgg tac ctg cag aag cca ggg cag	144
Asp Asp Gly Asn Thr Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln	
35 40 45	
tct cca cag ctc cta atc tat acg ctt tcc tat cgg gcc tct gga gtc	192
Ser Pro Gln Leu Leu Ile Tyr Thr Leu Ser Tyr Arg Ala Ser Gly Val	
50 55 60	
cca gac agg ttc agt ggc agt ggg tca ggc act gat ttc aca ctg aaa	240
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys	
65 70 75 80	
atc agc agg gtg gag gct gag gat gtt gga gtt tat tac tgc atg caa	288
Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln	
85 90 95	
cgt ata gag ttt cct tac act ttt ggc cag ggg acc aaa gtg gat atc	336
Arg Ile Glu Phe Pro Tyr Thr Phe Gly Gln Gly Thr Lys Val Asp Ile	
100 105 110	
aaa cgt	342
Lys Arg	

<210> 62	
<211> 114	
<212> PRT	
<213> Homo sapiens	
<400> 62	
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly	
1 5 10 15	
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Asp Ser	
20 25 30	
Asp Asp Gly Asn Thr Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln	
35 40 45	
Ser Pro Gln Leu Leu Ile Tyr Thr Leu Ser Tyr Arg Ala Ser Gly Val	
50 55 60	
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys	
65 70 75 80	
Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln	
85 90 95	
Arg Ile Glu Phe Pro Tyr Thr Phe Gly Gln Gly Thr Lys Val Asp Ile	
100 105 110	

Lys Arg

<210> 63
 <211> 342
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(342)
 <223>

<400> 63

gat	gtt	gtg	atg	act	cag	tct	cca	ctc	tcc	ctg	ccc	gtc	acc	cct	gga	48
Asp	Val	Val	Met	Thr	Gln	Ser	Pro	Leu	Ser	Leu	Pro	Val	Thr	Pro	Gly	
1			5				10				15					

gag

ccg	gcc	tcc	atc	tcc	tgc	agg	tct	agt	cag	agc	ctc	ttg	gat	agt	96	
Glu	Pro	Ala	Ser	Ile	Ser	Cys	Arg	Ser	Ser	Gln	Ser	Leu	Leu	Asp	Ser	
20			25						30							

gat

gat	gga	aac	acc	tat	ttg	gac	tgg	tac	ctg	cag	aag	cca	ggg	cag	144	
Asp	Asp	Gly	Asn	Thr	Tyr	Leu	Asp	Trp	Tyr	Leu	Gln	Lys	Pro	Gly	Gln	
35			40				45									

tct

cca	cag	ctc	cta	atc	tat	acg	ctt	tcc	tat	cg	gcc	tct	gga	gtc	192	
Ser	Pro	Gln	Leu	Leu	Ile	Tyr	Thr	Leu	Ser	Tyr	Arg	Ala	Ser	Gly	Val	
50			55				60									

cca

gac	agg	ttc	agt	ggc	agt	ggg	tca	ggc	act	gat	ttc	aca	ctg	aaa	240	
Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Lys	
65			70				75			80						

atc

agc	agg	gtg	gag	gct	gag	gat	gtt	gga	gtt	tat	tac	tgc	atg	caa	288	
Ile	Ser	Arg	Val	Glu	Ala	Glu	Asp	Val	Gly	Val	Tyr	Tyr	Cys	Met	Gln	
85			90				95									

cgt

ata	gag	ttt	cct	tac	act	ttt	ggc	cag	ggg	acc	aag	gtg	gaa	atc	336	
Arg	Ile	Glu	Phe	Pro	Tyr	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	
100			105				110									

aaa

cgt	342															
Lys	Arg															

<210> 64
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 64

Asp	Val	Val	Met	Thr	Gln	Ser	Pro	Leu	Ser	Leu	Pro	Val	Thr	Pro	Gly	
1			5				10				15					

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Asp Ser
 20 25 30

Asp Asp Gly Asn Thr Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln
 35 40 45

Ser Pro Gln Leu Leu Ile Tyr Thr Leu Ser Tyr Arg Ala Ser Gly Val
 50 55 60

Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys
 65 70 75 80

Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln
 85 90 95

Arg Ile Glu Phe Pro Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 100 105 110

Lys Arg

<210> 65
 <211> 339
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(339)
 <223>

<400> 65
 gat att gtg atg acc cag act cca ctc tcc ctg ccc gtc acc cct gga 48
 Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val Thr Pro Gly
 1 5 10 15

gag ccg gcc tcc atc tcc tgc agg tct agt cag agc ctc ttg gat agt 96
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Asp Ser
 20 25 30

gat gat gga aac acc tat ttg gac tgg tac ctg cag aag cca ggg cag 144
 Asp Asp Gly Asn Thr Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln
 35 40 45

tct cca cag ctc cta atc tat acg ctt tcc tat cgg gcc tct gga gtc 192
 Ser Pro Gln Leu Leu Ile Tyr Thr Leu Ser Tyr Arg Ala Ser Gly Val
 50 55 60

cca gac agg ttc agt ggc agt ggg tca ggc act gat ttc aca ctg aaa 240
 Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys
 65 70 75 80

atc agc agg gtg gag gct gag gat gtt gga gtt tat tac tgc atg caa 288
 Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln
 85 90 95

gct aca caa ttg tac act ttt ggc cag ggg acc aag gtg gag atc aaa	336
Ala Thr Gln Leu Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys	
100 105 110	

cgt	339
Arg	

<210> 66	
<211> 113	
<212> PRT	
<213> Homo sapiens	

<400> 66	
Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val Thr Pro Gly	
1 5 10 15	

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Asp Ser	
20 25 30	

Asp Asp Gly Asn Thr Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln	
35 40 45	

Ser Pro Gln Leu Leu Ile Tyr Thr Leu Ser Tyr Arg Ala Ser Gly Val	
50 55 60	

Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys	
65 70 75 80	

Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln	
85 90 95	

Ala Thr Gln Leu Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys	
100 105 110	

Arg

<210> 67	
<211> 342	
<212> DNA	
<213> Homo sapiens	

<220>	
<221> CDS	
<222> (1) .. (342)	
<223>	

<400> 67	
gat att gtg atg act cag tct cca gac tcc ctg gct gtg tct ctg ggc	48
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly	
1 5 10 15	

gag agg gcc acc atc aac tgc aag tcc agc cag agt gtt tta tac agc	96
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser	

20	25	30	
tcc aac aat aag aac tac tta gct tgg tac cag cag aaa cca gga cag			144
Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln			
35	40	45	
cct cct aaa ctg ctc att tac tgg gca tct acc cgg gaa tcc ggg gtc			192
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val			
50	55	60	
cct gac cga ttc agt ggc agc ggg tct ggg aca gat ttc act ctc acc			240
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr			
65	70	75	80
atc agc acc ctg cag gct gaa gat gtg gca gtt tat tac tgt cag caa			288
Ile Ser Thr Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln			
85	90	95	
tat tat agt act cct ccg acg ttc ggc caa ggg acc aag ctg gag atc			336
Tyr Tyr Ser Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile			
100	105	110	
aaa cgt			342
Lys Arg			

<210> 68
<211> 114
<212> PRT
<213> Homo sapiens

<400> 68			
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly			
1	5	10	15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser			
20	25	30	
Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln			
35	40	45	
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val			
50	55	60	
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr			
65	70	75	80
Ile Ser Thr Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln			
85	90	95	
Tyr Tyr Ser Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile			
100	105	110	
Lys Arg			

<210> 69
 <211> 342
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1) .. (342)
 <223>

<400> 69
 gat gtt gtg atg act cag act cca gac tcc ctg gct gtg tct ctg ggc 48
 Asp Val Val Met Thr Gln Thr Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15
 gag agg gcc acc atc aac tgc aag tcc agc cag agt gtt tta cac aag 96
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu His Lys
 20 25 30
 tcc aac aat aag aac tat tta gct tgg tac cag cag aaa cca gga cag 144
 Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45
 cct cct aaa ttg ctc att cac tgg gct tct acc cgg gaa ttc ggg gtc 192
 Pro Pro Lys Leu Leu Ile His Trp Ala Ser Thr Arg Glu Phe Gly Val
 50 55 60
 cct gac cga ctc agt ggc agc ggg tct gcg aca gat ttc act ctc acc 240
 Pro Asp Arg Leu Ser Gly Ser Gly Ser Ala Thr Asp Phe Thr Leu Thr
 65 70 75 80
 atc agc agc ctg cag gct gaa gac gtg gca gtc tat tac tgt cag caa 288
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95
 tat tat gct gtt cct ctc acc ttc ggc caa ggg aca cga ctg gag att 336
 Tyr Tyr Ala Val Pro Leu Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile
 100 105 110
 aaa cgt 342
 Lys Arg

<210> 70
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 70
 Asp Val Val Met Thr Gln Thr Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu His Lys
 20 25 30

Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45

Pro Pro Lys Leu Leu Ile His Trp Ala Ser Thr Arg Glu Phe Gly Val
 50 55 60

Pro Asp Arg Leu Ser Gly Ser Gly Ser Ala Thr Asp Phe Thr Leu Thr
 65 70 75 80

Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95

Tyr Tyr Ala Val Pro Leu Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile
 100 105 110

Lys Arg

<210> 71
 <211> 342
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(342)
 <223>

<400> 71
 gat att gtg atg acc cag acg cca gac tcc ctg gct gtg tct ctg ggc 48
 Asp Ile Val Met Thr Gln Thr Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15

gag agg gcc acc atc aac tgc aag tcc agc cag agt gtt tta tac agc 96
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
 20 25 30

tcc aac aat aag aac tac tta gct tgg tac cag cag aaa cca gga cag 144
 Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45

cct cct aaa ctg ctc att tac tgg gca tct acc cgg gaa tcc ggg gtc 192
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
 50 55 60

cct gac cga ttc agt ggc agc ggg tct ggg aca gat ttc act ctc acc 240
 Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80

atc agc acc ctg cag gct gaa gat gtg gca gtt tat tac tgt cag caa 288
 Ile Ser Thr Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95

tat tat agt act cct ccg acg ttc agc caa ggg acc aag gtg gaa atc 336
 Tyr Tyr Ser Thr Pro Pro Thr Phe Ser Gln Gly Thr Lys Val Glu Ile
 100 105 110

aaa cgt
Lys Arg 342

<210> 72
<211> 114
<212> PRT
<213> Homo sapiens

<400> 72
Asp Ile Val Met Thr Gln Thr Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
20 25 30
Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80
Ile Ser Thr Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
85 90 95
Tyr Tyr Ser Thr Pro Pro Thr Phe Ser Gln Gly Thr Lys Val Glu Ile
100 105 110
Lys Arg

<210> 73
<211> 342
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1)..(342)
<223>

<400> 73
gat gtt gtg atg act cag tct cca gac tcc ctg act gtg tct ctg ggc 48
Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu Thr Val Ser Leu Gly
1 5 10 15
gag agg gcc acc atc aac tgc aag tcc agc cag agt gtt tta tac agc 96
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
20 25 30
tcc aac aat aag aac tac tta gct tgg tac cag cag aaa cca gga cag 144

Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln			
35	40	45	
cct cct aag ctg ctc att tac tgg gca cct acc cgg gaa tcc ggg gtc			192
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Pro Thr Arg Glu Ser Gly Val			
50	55	60	
cct gac cga ttc agt ggc agc ggg tct ggg aca gat ttc act ctc acc			240
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr			
65	70	75	80
atc agc agc ctg cag gct gaa gat gtg gca gtt tat tac tgt cag caa			288
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln			
85	90	95	
tat tat agt act cct ccg acg ttc ggc cag ggg acc aag gtg gaa atc			336
Tyr Tyr Ser Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile			
100	105	110	
aaa cgt			342
Lys Arg			

<210> 74			
<211> 114			
<212> PRT			
<213> Homo sapiens			
<400> 74			
Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu Thr Val Ser Leu Gly			
1	5	10	15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser			
20	25	30	
Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln			
35	40	45	
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Pro Thr Arg Glu Ser Gly Val			
50	55	60	
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr			
65	70	75	80
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln			
85	90	95	
Tyr Tyr Ser Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile			
100	105	110	
Lys Arg			

<210> 75			
<211> 342			

<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1)..(342)
<223>

<400> 75
gat gtt gtg atg act cag tct cca gac tcc ctg gct gtg tct ctg ggc 48
Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15

gag agg gcc acc atc aac tgc aag tcc agc cag ggt gtt tta cac aag 96
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Gly Val Leu His Lys
20 25 30

tcc aac aat aag aac tat tta gct tgg tac cag cag aaa cca gga cag 144
Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45

cct cct aaa ttg ctc att cac tgg gct tct acc cgg gaa ttc ggg gtc 192
Pro Pro Lys Leu Leu Ile His Trp Ala Ser Thr Arg Glu Phe Gly Val
50 55 60

cct gac cga ctc agt ggc agc ggg tct gcg aca gat ttc act ctc acc 240
Pro Asp Arg Leu Ser Gly Ser Gly Ser Ala Thr Asp Phe Thr Leu Thr
65 70 75 80

atc agc agc ctg cag gct gaa gac gtg gca gtc tat tac tgt cag caa 288
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
85 90 95

tat tat gct gtt cct ctc acc ttc ggc caa ggg aca cga ctg gag att 336
Tyr Tyr Ala Val Pro Leu Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile
100 105 110

aaa cgt 342
Lys Arg

<210> 76
<211> 114
<212> PRT
<213> Homo sapiens

<400> 76
Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Gly Val Leu His Lys
20 25 30

Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45

Pro Pro Lys Leu Leu Ile His Trp Ala Ser Thr Arg Glu Phe Gly Val
 50 55 60

Pro Asp Arg Leu Ser Gly Ser Gly Ser Ala Thr Asp Phe Thr Leu Thr
 65 70 75 80

Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95

Tyr Tyr Ala Val Pro Leu Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile
 100 105 110

Lys Arg

<210> 77

<211> 342

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)..(342)

<223>

<400> 77

gat att gtg atg acc cag acg cca gac tcc ctg gct gtg tct ctg ggc 48
 Asp Ile Val Met Thr Gln Thr Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15

gag agg gcc acc atc aac tgc aag tcc agc cag agt gtt tta tac agc 96
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
 20 25 30

tcc aac aat aag aac tac tta gct tgg tac cag cag aaa cca gga cag 144
 Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45

cct cct aaa ctg ctc att tac tgg gca tct acc cgg gaa tcc ggg gtc 192
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
 50 55 60

cct gac cga ttc agt ggc agc ggg tct ggg aca gat ttc act ctc acc 240
 Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80

atc agc acc ctg cag gct gaa gat gtg gca gtt tat tac tgt cag caa 288
 Ile Ser Thr Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95

tat tat agt act cct ccg acg ttc ggc caa ggg acc aag gtg gaa atc 336
 Tyr Tyr Ser Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 100 105 110

aaa cgt

Lys Arg

342

<210> 78
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 78
 Asp Ile Val Met Thr Gln Thr Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
 20 25 30
 Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
 50 55 60
 Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80
 Ile Ser Thr Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95
 Tyr Tyr Ser Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 100 105 110
 Lys Arg

<210> 79
 <211> 342
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(342)
 <223>

<400> 79
 gat gtt gtg atg act cag tct cca gac tcc ctg gct gtg cct ctg ggc 48
 Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Pro Leu Gly
 1 5 10 15
 gag agg gcc acc atc aac tgc aag tcc agc cag agt gtt tta cac aag 96
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu His Lys
 20 25 30
 tcc aac aat aag aac cat tta gct tgg tac cag cag aaa cca gga cag 144
 Ser Asn Asn Lys Asn His Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45

cct cct aaa ttg ctc att cac tgg gct tct acc cgg gaa ttc ggg gtc	192
Pro Pro Lys Leu Leu Ile His Trp Ala Ser Thr Arg Glu Phe Gly Val	
50 55 60	
cct gac cga ctc agt ggc agc ggg tct gcg aca gat ttc act ctc acc	240
Pro Asp Arg Leu Ser Gly Ser Gly Ser Ala Thr Asp Phe Thr Leu Thr	
65 70 75 80	
atc aac agc ctg cag gct gaa gac gcg gca gtc tat tac tgt cag caa	288
Ile Asn Ser Leu Gln Ala Glu Asp Ala Ala Val Tyr Tyr Cys Gln Gln	
85 90 95	
tat tat gct gtt cct ctc acc ttc ggc caa ggg aca cga ctg gag att	336
Tyr Tyr Ala Val Pro Leu Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile	
100 105 110	
aaa cgt	342
Lys Arg	

<210> 80	
<211> 114	
<212> PRT	
<213> Homo sapiens	
<400> 80	
Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Pro Leu Gly	
1 5 10 15	
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu His Lys	
20 25 30	
Ser Asn Asn Lys Asn His Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln	
35 40 45	
Pro Pro Lys Leu Leu Ile His Trp Ala Ser Thr Arg Glu Phe Gly Val	
50 55 60	
Pro Asp Arg Leu Ser Gly Ser Gly Ser Ala Thr Asp Phe Thr Leu Thr	
65 70 75 80	
Ile Asn Ser Leu Gln Ala Glu Asp Ala Ala Val Tyr Tyr Cys Gln Gln	
85 90 95	
Tyr Tyr Ala Val Pro Leu Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile	
100 105 110	
Lys Arg	

<210> 81	
<211> 342	
<212> DNA	
<213> Homo sapiens	

```

<220>
<221> CDS
<222> (1)...(342)
<223>

<400> 81
gat att gtg atg act cag tct cca gac tcc ctg gct gtg tct ctg ggc 48
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15

gag agg gcc acc atc aac tgc aag tcc agc cag agt gtt tta tac agc 96
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
20 25 30

tcc aac aat aag aac tac tta gct tgg tac cag cag aaa cca gga cag 144
Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45

cct cct aaa ctg ctc att tac tgg gca tct acc cgg gaa tcc ggg gtc 192
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60

cct gac cga ttc agt ggc agc ggg tct ggg aca gat ttc act ctc acc 240
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

atc agc acc ctg cag gct gaa gat gtg gca gtt tat tac tgt cag caa 288
Ile Ser Thr Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
85 90 95

tat tat agt act cct ccg acg ttc ggc caa ggg acc aaa gtg gat atc 336
Tyr Tyr Ser Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Asp Ile
100 105 110

aaa cgt
Lys Arg 342

```

```

<210> 82
<211> 114
<212> PRT
<213> Homo sapiens

<400> 82
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1           5                   10                  15

Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
20           25                   30

Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
35           40                   45

Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50           55                   .                  60

```

Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80

Ile Ser Thr Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95

Tyr Tyr Ser Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Asp Ile
 100 105 110

Lys Arg

<210> 83

<211> 342

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)..(342)

<223>

<400> 83

gat gtt gtg atg act cag tct cca gac tcc ctg gct gtg tct ctg ggc 48
 Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15

gag agg gcc acc atc aac tgc aag tcc agc cag agt gtt tta tac agc 96
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
 20 25 30

tcc aac aat aag aac tac tta gct tgg tac cag cag aaa cca gga cag 144
 Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45

cct cct aaa ttg ctc att cac tgg gct tct acc cgg gaa ttc ggg gtc 192
 Pro Pro Lys Leu Leu Ile His Trp Ala Ser Thr Arg Glu Phe Gly Val
 50 55 60

cct gac cga ctc agt ggc agc ggg tct gcg aca gat ttc act ctc acc 240
 Pro Asp Arg Leu Ser Gly Ser Ala Thr Asp Phe Thr Leu Thr
 65 70 75 80

atc agc agc ctg cag gct gaa gac gtg gca gtc tat tac tgt cag caa 288
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95

tat tat gct gtt cct ctc acc ttc ggc caa ggg aca cga ctg gag att 336
 Tyr Tyr Ala Val Pro Leu Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile
 100 105 110

aaa cgt

Lys Arg

342

<210> 84
<211> 114
<212> PRT
<213> Homo sapiens

<400> 84
Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
20 25 30

Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45

Pro Pro Lys Leu Leu Ile His Trp Ala Ser Thr Arg Glu Phe Gly Val
50 55 60

Pro Asp Arg Leu Ser Gly Ser Gly Ser Ala Thr Asp Phe Thr Leu Thr
65 70 75 80

Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
85 90 95

Tyr Tyr Ala Val Pro Leu Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile
100 105 110

Lys Arg

<210> 85
<211> 342
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1) .. (342)
<223>

<400> 85
gac atc gtg atg acc cag tct cca gac tcc ctg gct gtg tct ctg ggc 48
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15

gag agg gcc acc atc aac tgc aag tcc agc cag agt gtt tta tac agc 96
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
20 25 30

tcc aac aat aag aac tac tta gct tgg tac cag cag aaa cca gga cag 144
Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45

cct cct aaa ctg ctc att tac tgg gca tct acc cgg gaa tcc ggg gtc 192
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60

cct gac cga ttc agt ggc agc ggg tct ggg aca gat ttc act ctc acc	240
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr	
65 70 75 80	
atc agc acc ctg cag gct gaa gat gtg gca gtt tat tac tgt cag caa	288
Ile Ser Thr Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln	
85 90 95	
tat tat agt act cct ccg acg ttc ggc caa ggg acc aag gtg gaa atc	336
Tyr Tyr Ser Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile	
100 105 110	
aaa cgt	342
Lys Arg	

<210> 86	
<211> 114	
<212> PRT	
<213> Homo sapiens	
<400> 86	
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly	
1 5 10 15	
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser	
20 25 30	
Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln	
35 40 45	
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val	
50 55 60	
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr	
65 70 75 80	
Ile Ser Thr Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln	
85 90 95	
Tyr Tyr Ser Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile	
100 105 110	
Lys Arg	

<210> 87	
<211> 327	
<212> DNA	
<213> Homo sapiens	
<220>	
<221> CDS	
<222> (1)..(327)	

<223>

<400> 87
 gaa att gtg ctg act cag tct cca ggc acc ctg tct ttg tct cca ggg 48
 Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
 1 5 10 15

gaa aga gcc acc ctc tcc tgc aag gcc agt cag agt ttt agc agc aac 96
 Glu Arg Ala Thr Leu Ser Cys Lys Ala Ser Gln Ser Phe Ser Ser Asn
 20 25 30

tac tta gcc tgg tac cag cag aaa cct ggc cag gct ccc agg ctg ctc 144
 Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
 35 40 45

atc tat ggt gca tcc agc agg gcc act ggc atc cca gac agg ttc agt 192
 Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
 50 55 60

ggc agt aaa tct ggg aca gac ttc act ctc acc atc agc aga ctg gag 240
 Gly Ser Lys Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
 65 70 75 80

cct gaa gat ttt gca gtg tat tac tgt cag cag tat gtt acc tca ccg 288
 Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Val Thr Ser Pro
 85 90 95

tac act ttt ggc ctg ggg acc aag gtg gag atc aaa cgt 327
 Tyr Thr Phe Gly Leu Gly Thr Lys Val Glu Ile Lys Arg
 100 105

<210> 88
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 88
 Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly 1
 5 10 15

Glu Arg Ala Thr Leu Ser Cys Lys Ala Ser Gln Ser Phe Ser Ser Asn
 20 25 30

Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
 35 40 45

Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
 50 55 60

Gly Ser Lys Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
 65 70 75 80

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Val Thr Ser Pro
 85 90 95

Tyr Thr Phe Gly Leu Gly Thr Lys Val Glu Ile Lys Arg

100

105

<210> 89
 <211> 325
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(324)
 <223>

<400> 89

gat gtt ggg atg aca cag tct tca gcc acc cta tct ttg tct cca ggg	48
Asp Val Gly Met Thr Gln Ser Ser Ala Thr Leu Ser Leu Ser Pro Gly	
1 5 10 15	
gaa aga gcc acc ctc tcc tgc agg gcc agt cag agg att agc agt tat	96
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Arg Ile Ser Ser Tyr	
20 25 30	
tta gcc tgg tac caa cag aaa cct ggc cag gct ccc aga ctc ctc atc	144
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile	
35 40 45	
tat gag gca gtc aaa agg gcc act ggc atc cca gcc agg ttc agt ggc	192
Tyr Glu Ala Val Lys Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly	
50 55 60	
agt ggg tct ggg aca gag ttc acc ctc acc atc aac agc cta gag cct	240
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Asn Ser Leu Glu Pro	
65 70 75 80	
gaa gat ttt gca gtt tat ttc tgt cag cag cgt ggc agc tgt cct ggg	288
Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Arg Gly Ser Cys Pro Gly	
85 90 95	
acg ttc ggc cag ggg acc aag ctg gag atc aaa cgt t	325
Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg	
100 105	

<210> 90
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 90

Asp Val Gly Met Thr Gln Ser Ser Ala Thr Leu Ser Leu Ser Pro Gly	
1 5 10 15	
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Arg Ile Ser Ser Tyr	
20 25 30	
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile	
35 40 45	

Tyr	Glu	Ala	Val	Lys	Arg	Ala	Thr	Gly	Ile	Pro	Ala	Arg	Phe	Ser	Gly
50															
														60	
Ser	Gly	Ser	Gly	Thr	Glu	Phe	Thr	Leu	Thr	Ile	Asn	Ser	Leu	Glu	Pro
65															80
Glu	Asp	Phe	Ala	Val	Tyr	Phe	Cys	Gln	Gln	Arg	Gly	Ser	Cys	Pro	Gly
															95
Thr	Phe	Gly	Gln	Gly	Thr	Lys	Leu	Glu	Ile	Lys	Arg				
100															
															105

<210> 91
 <211> 366
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(366)
 <223>

<400> 91																
cag	gtc	cag	ctg	gtg	caa	tct	ggg	gct	gag	gtg	aag	aag	cct	ggg	gcc	48
Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala	
1			5					10						15		
tca	gtg	aag	gtc	tcc	tgc	aag	gct	tct	gga	tac	acc	ttc	acc	ggc	tac	96
Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr	Gly	Tyr	
			20					25						30		
tat	atg	cac	tgg	gtg	cga	cag	gcc	cct	gga	caa	ggg	ctt	gag	tgg	atg	144
Tyr	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Met	
			35					40						45		
gga	tgg	atc	aac	cct	aac	agt	ggt	ggc	aca	aag	tat	gca	cag	aag	ttt	192
Gly	Trp	Ile	Asn	Pro	Asn	Ser	Gly	Gly	Thr	Lys	Tyr	Ala	Gln	Lys	Phe	
			50					55						60		
cag	ggc	agg	gtc	acc	atg	acc	agg	gac	acg	tcc	atc	agc	aca	gcc	tac	240
Gln	Gly	Arg	Val	Thr	Met	Thr	Arg	Asp	Thr	Ser	Ile	Ser	Thr	Ala	Tyr	
			65					70						80		
atg	gag	ctg	agc	agg	ctg	aga	tct	gac	gac	acg	gcc	gtg	tat	tac	tgt	288
Met	Glu	Leu	Ser	Arg	Leu	Arg	Ser	Asp	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	
								85						95		
gcg	aga	gga	tac	gat	att	ttg	act	ggt	tat	ggc	tgg	ttc	gac	ccc	tgg	336
Ala	Arg	Gly	Tyr	Asp	Ile	Leu	Thr	Gly	Tyr	Gly	Trp	Phe	Asp	Pro	Trp	
								100						110		
ggc	cag	gga	acc	ctg	gtc	acc	gtc	tcc	tca							366
Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser							
								115						120		

<210> 92
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 92
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr
 20 25 30
 Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Lys Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Gly Tyr Asp Ile Leu Thr Gly Tyr Gly Trp Phe Asp Pro Trp
 100 105 110
 Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 93
 <211> 360
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(360)
 <223>

<400> 93
 cag gtc cag ctg gtg caa tct ggg gga ggc ttg gtc cag cct ggg ggg 48
 Gln Val Gln Leu Val Gln Ser Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 tcc ctg aga ctc tcc tgt gca gcc tct gga ttc acc ttt agt agc tat 96
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30
 tgg atg agt tgg gtc cgc cag gct cca ggg aag ggg ctg gag tgg gtg 144
 Trp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 gcc aac ata aag caa gat gga agt gag aaa tac tat gtg gac tct gtg 192
 Ala Asn Ile Lys Gln Asp Gly Ser Glu Lys Tyr Tyr Val Asp Ser Val

50	55	60
----	----	----

aag ggc cga ttc acc atc tcc aga gac aac gcc aag aac tca ctg tat	240		
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr			
65	70	75	80

ctg caa atg aac acc ctg aga gcc gag gac acg gct gtg tat tac tgt	288		
Leu Gln Met Asn Thr Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys			
85	90	95	

gcg aga gat cgt ttg tgg acc cag ggg ttt ttt gac tac tgg ggc cag	336		
Ala Arg Asp Arg Leu Trp Thr Gln Gly Phe Phe Asp Tyr Trp Gly Gln			
100	105	110	

gga acc ctg gtc acc gtc tcc tca	360	
Gly Thr Leu Val Thr Val Ser Ser		
115	120	

<210> 94

<211> 120

<212> PRT

<213> Homo sapiens

<400> 94

Gln Val Gln Leu Val Gln Ser Gly Gly Leu Val Gln Pro Gly Gly			
1	5	10	15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr			
20	25	30	

Trp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val			
35	40	45	

Ala Asn Ile Lys Gln Asp Gly Ser Glu Lys Tyr Tyr Val Asp Ser Val			
50	55	60	

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr			
65	70	75	80

Leu Gln Met Asn Thr Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys			
85	90	95	

Ala Arg Asp Arg Leu Trp Thr Gln Gly Phe Phe Asp Tyr Trp Gly Gln			
100	105	110	

Gly Thr Leu Val Thr Val Ser Ser		
115	120	

<210> 95

<211> 339

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1) .. (339)
<223>

<210> 96
<211> 113
<212> PRT
<213> *Homo sapiens*

<400> 96
 Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15

 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
 20 25 30

 Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45

 Pro Pro Asn Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
 50 55 60

 Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80

Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95

Tyr Tyr Thr Thr Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 100 105 110

Lys

<210> 97
 <211> 23
 <212> DNA
 <213> Artificial

<220>
 <223> Artificially Synthesized Primer Sequence

<400> 97
 caggtkcagc tggtgcagtc tgg 23

<210> 98
 <211> 23
 <212> DNA
 <213> Artificial

<220>
 <223> Artificially Synthesized Primer Sequence

<400> 98
 caggtccagc ttgtgcagtc tgg 23

<210> 99
 <211> 23
 <212> DNA
 <213> Artificial

<220>
 <223> Artificially Synthesized Primer Sequence

<400> 99
 saggtccagc tggtacagtc tgg 23

<210> 100
 <211> 23
 <212> DNA
 <213> Artificial

<220>
 <223> Artificially Synthesized Primer Sequence

<400> 100
 caratgcagc tggtgcagtc tgg 23

<210> 101
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 101
cagatcacct tgaaggagtc tgg 24

<210> 102
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 102
caggtcacct tgarggagtc tgg 24

<210> 103
<211> 23
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 103
gargtgcagc tgggtggagtc tgg 23

<210> 104
<211> 23
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 104
caggtgcagc tgggtggagtc tgg 23

<210> 105
<211> 23
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 105
 gaggtgcagc tggggagtc tgg 23

<210> 106
 <211> 24
 <212> DNA
 <213> Artificial
 <220>
 <223> Artificially Synthesized Primer Sequence

<400> 106
 cagstgcagc tgcaggagtc gggc 24

<210> 107
 <211> 24
 <212> DNA
 <213> Artificial
 <220>
 <223> Artificially Synthesized Primer Sequence

<400> 107
 caggtgcagc tacagcagtg gggc 24

<210> 108
 <211> 24
 <212> DNA
 <213> Artificial
 <220>
 <223> Artificially Synthesized Primer Sequence

<400> 108
 gargetgcagc tgggtgcagtc tgg 24

<210> 109
 <211> 24
 <212> DNA
 <213> Artificial
 <220>
 <223> Artificially Synthesized Primer Sequence

<400> 109
 caggtacagc tgcagcagtc aggt 24

<210> 110
 <211> 23
 <212> DNA
 <213> Artificial

```

<220>
<223> Artificially Synthesized Primer Sequence

<400> 110
caggtscagc tggtgcaatc tgg 23

<210> 111
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 111
tgaggagacg gtgaccaggg tkcc 24

<210> 112
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 112
tgaagagacg gtgaccattg tccc 24

<210> 113
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 113
tgaggagacg gtgaccgtgg tccc 24

<210> 114
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 114
racatccaga tgacctcagtc tcca 24

<210> 115

```

```

<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 115
gmcatccagt tgacccagtc tcca                                24

<210> 116
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 116
gccatccrga tgacccagtc tcca                                24

<210> 117
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 117
gtcatctgga tgacccagtc tcca                                24

<210> 118
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 118
gatattgtga tgacccagac tcca                                24

<210> 119
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 119
gatrttgtga tgactcagtc tcca                                24

```

<210> 120
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 120
gaaattgtgt tgacrcagtc tcca 24

<210> 121
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 121
gaaatagtga tgacgcagtc tcca 24

<210> 122
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 122
gaaattgtaa tgacacacagtc tcca 24

<210> 123
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 123
gacatcgtga tgacccagtc tcca 24

<210> 124
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 124	24
gaaacgacac tcacgcagtc tcca	
<210> 125	
<211> 24	
<212> DNA	
<213> Artificial	
<220>	
<223> Artificially Synthesized Primer Sequence	
<400> 125	24
gaaattgtgc tgactcagtc tcca	
<210> 126	
<211> 24	
<212> DNA	
<213> Artificial	
<220>	
<223> Artificially Synthesized Primer Sequence	
<400> 126	24
gatgttgtga tgacacagtc tcca	
<210> 127	
<211> 24	
<212> DNA	
<213> Artificial	
<220>	
<223> Artificially Synthesized Primer Sequence	
<400> 127	24
acgtttgatt tccaccttgg tccc	
<210> 128	
<211> 24	
<212> DNA	
<213> Artificial	
<220>	
<223> Artificially Synthesized Primer Sequence	
<400> 128	24
acgtttgatc tccascttgg tccc	
<210> 129	
<211> 24	
<212> DNA	
<213> Artificial	

<220>
<223> Artificially Synthesized Primer Sequence

<400> 129
acgtttgata tccactttgg tccc

24

<210> 130
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 130
acgtttaatc tccagtcgtg tccc

24

<210> 131
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 131
cagtctgtgc tgactcagcc accc

24

<210> 132
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 132
cagtctgtgy tgacgcagcc gccc

24

<210> 133
<211> 22
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 133
cagtctgccc tgactcagcc ts

22

<210> 134

<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 134
tcctatgwgc tgactcagcc accc 24

<210> 135
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 135
tcctatgagc tgacacagcy accc 24

<210> 136
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 136
tcttctgagc tgactcagga ccct 24

<210> 137
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 137
tcctatgagc tgatgcagcc accc 24

<210> 138
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 138
cagcctgtgc tgactcaatc atcc 24

<210> 139
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 139
cagcttgc tgactcaatc gccc 24

<210> 140
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 140
ctgcctgtgc tgactcagcc cccc 24

<210> 141
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 141
cagcctgtgc tgactcagcc aycl 24

<210> 142
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 142
caggctgtgc tgactcagcc ggct 24

<210> 143
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 143
aattttatgc tgactcagcc ccac 24

<210> 144
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 144
cagrcgtgg tgactcagga gccc 24

<210> 145
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 145
cagactgtgg tgacccagga gcca 24

<210> 146
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 146
cwgccctgtgc tgactcagcc acct 24

<210> 147
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 147
caggcagggc tgactcagcc accc 24

<210> 148
<211> 24
<212> DNA
<213> Artificial

```

<220>
<223> Artificially Synthesized Primer Sequence

<400> 148
accttaggacg gtgacccttgg tccc                                24

<210> 149
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 149
accttaggacg gtcagcttgg tccc                                24

<210> 150
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 150
accgaggacg gtcagctggg tgcc                                24

<210> 151
<211> 91
<212> DNA
<213> Artificial

<220>
<223> Template Linker Sequence

<400> 151
ggacaatggt caccgtctct tcaggtggtg gtgggtcggt tggtgggtgt tcgggtggtg      60
gcggatcgga catccagatg acccagtctc c                                91

<210> 152
<211> 28
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 152
gcaccctgggt caccgtctcc tcaggtgg                                28

```

```

<210> 153
<211> 28
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 153
ggacaatggt caccgtctct tcaggtgg                                28

<210> 154
<211> 28
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 154
gaaccctggt caccgtctcc tcaggtgg                                28

<210> 155
<211> 28
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 155
ggaccacggt caccgtctcc tcaggtgg                                28

<210> 156
<211> 32
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 156
ggagactggg tcatctggat gtccgatccg cc                                32

<210> 157
<211> 32
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

```

<400> 157
ggagactgag tcatacacaac atccgatccg cc 32

<210> 158
<211> 32
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 158
ggagactgag tcatacacaat ttccgatccg cc 32

<210> 159
<211> 32
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 159
ggagactggg tcatacacat gtccgatccg cc 32

<210> 160
<211> 32
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 160
ggagactgag tgagtgtcgt ttccgatccg cc 32

<210> 161
<211> 32
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 161
ggagactgag tcagcacaat ttccgatccg cc 32

<210> 162
<211> 42
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 162
ggccggctgctg tcaacacaga ctgcgatccg ccaccgcccag ag 42

<210> 163
<211> 42
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 163
gcaggctgag tcagagcaga ctgcgatccg ccaccgcccag ag 42

<210> 164
<211> 42
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 164
ggtggctgag tcagcacata ggacgatccg ccaccgcccag ag 42

<210> 165
<211> 42
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 165
gggtcctgag tcagctcaga agacgatccg ccaccgcccag ag 42

<210> 166
<211> 42
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 166
ggcggttgag tcagtataac gtgcgatccg ccaccgcccag ag 42

<210> 167
<211> 42

<212> DNA		
<213> Artificial		
<220>		
<223> Artificially Synthesized Primer Sequence		
<400> 167		
gacggctgag tcagcacaga ctgcgatccg ccaccgccag ag	42	
<210> 168		
<211> 42		
<212> DNA		
<213> Artificial		
<220>		
<223> Artificially Synthesized Primer Sequence		
<400> 168		
tggggctgag tcagcataaa attcgatccg ccaccgccag ag	42	
<210> 169		
<211> 39		
<212> DNA		
<213> Artificial		
<220>		
<223> Artificially Synthesized Primer Sequence		
<400> 169		
agtattgacc atggcccagg tgcagctggt gcagtctgg	39	
<210> 170		
<211> 39		
<212> DNA		
<213> Artificial		
<220>		
<223> Artificially Synthesized Primer Sequence		
<400> 170		
agtattgacc atggcccagg tcaacttaag ggagtctgg	39	
<210> 171		
<211> 39		
<212> DNA		
<213> Artificial		
<220>		
<223> Artificially Synthesized Primer Sequence		
<400> 171		
agtattgacc atggccgagg tgcagctggt ggagtctgg	39	

```

<210> 172
<211> 39
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 172
agtattgacc atggcccagg tgcagctgca ggagtcggg 39

<210> 173
<211> 39
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 173
agtattgacc atggcccagg tgcagctgtt gcagtctgc 39

<210> 174
<211> 39
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 174
agtattgacc atggcccagg tacagctgca gcagtcagg 39

<210> 175
<211> 34
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 175
taatgaattc acgtttgatt tccacaccttgg tccc 34

<210> 176
<211> 34
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

```

<400> 176
taatgaattc acgtttgatc tccagcttgg tccc 34

<210> 177
<211> 34
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 177
taatgaattc acgtttgata tccactttgg tccc 34

<210> 178
<211> 34
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 178
taatgaattc acgtttgatc tccacaccttgg tccc 34

<210> 179
<211> 34
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 179
taatgaattc acgtttaatc tccagtcgtg tccc 34

<210> 180
<211> 34
<212> DNA
<213> Artificial

<220>
<223> Artificially Synthesized Primer Sequence

<400> 180
taatgaattc acctaggacg gtgacaccttgg tccc 34

<210> 181
<211> 34
<212> DNA
<213> Artificial

<220>
 <223> Artificially Synthesized Primer Sequence
 <400> 181
 taatgaattc acctaggacg gtcagcttgg tccc 34

<210> 182
 <211> 34
 <212> DNA
 <213> Artificial

<220>
 <223> Artificially Synthesized Primer Sequence
 <400> 182
 taatgaattc acctaaaacg gtgagctggg tccc 34

<210> 183
 <211> 861
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(861)
 <223>

<400> 183
 atg aaa tac ctg ctg ccg acc gct gct gct ggt ctg ctg ctc ctc gct 48
 Met Lys Tyr Leu Leu Pro Thr Ala Ala Ala Gly Leu Leu Leu Leu Ala
 1 5 10 15

gcc cag ccg gcg atg gcc atg gcc cag gtg cag ctg gtg cag tct ggg 96
 Ala Gln Pro Ala Met Ala Gln Val Gln Leu Val Gln Ser Gly
 20 25 30

gct gag gtg aag aag cct ggg gcc tca gtg aag gtc tcc tgc aag gct 144
 Ala Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala
 35 40 45

tct gga tac acc ttc acc ggc tac tat atg cac tgg gtg cga cag gcc 192
 Ser Gly Tyr Thr Phe Thr Gly Tyr Tyr Met His Trp Val Arg Gln Ala
 50 55 60

cct gga caa ggg ctt gag tgg atg gga tgg atc aac cct aac agt ggt 240
 Pro Gly Gln Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly
 65 70 75 80

ggc aca aag tat gca cag aag ttt cag ggc agg gtc acc atg acc agg 288
 Gly Thr Lys Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg
 85 90 95

gac acg tcc atc agc aca gcc tac atg gag ctg agc agg ctg aga tct 336
 Asp Thr Ser Ile Ser Thr Ala Tyr Met Glu Leu Ser Arg Leu Arg Ser
 100 105 110

gac gac acg gcc gtg tat tac tgt gcg aga gga tac gat att ttg act		384	
Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg Gly Tyr Asp Ile Leu Thr			
115	120	125	
ggt tat ggc tgg ttc gac ccc tgg ggc cag gga acc ctg gtc acc gtc		432	
Gly Tyr Gly Trp Phe Asp Pro Trp Gly Gln Gly Thr Leu Val Thr Val			
130	135	140	
tcc tca ggt ggt ggt tcg ggt ggt ggt tcg ggt ggt ggc gga		480	
Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ser Gly Gly Gly			
145	150	155	160
tcg gac atc gtg atg acc cag tct cca gac tcc ctg gct gtg tct ctg		528	
Ser Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu			
165	170	175	
ggc gag agg gcc acc atc aac tgc aag tcc agc cag agt gtt tta tac		576	
Gly Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr			
180	185	190	
agc tcc aac aat aag aac tac tta gct tgg tac cag cag aaa cca gga		624	
Ser Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly			
195	200	205	
cag cct cct aaa ctg ctc att tac tgg gca tct acc cgg gaa tcc ggg		672	
Gln Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly			
210	215	220	
gtc cct gac cga ttc agt ggc agc ggg tct ggg aca gat ttc act ctc		720	
Val Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu			
225	230	235	240
acc atc agc acc ctg cag gct gaa gat gtg gca gtt tat tac tgt cag		768	
Thr Ile Ser Thr Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln			
245	250	255	
caa tat tat agt act cct ccg acg ttc ggc caa ggg acc aag gtg gaa		816	
Gln Tyr Tyr Ser Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu			
260	265	270	
atc aaa cgt cgt gaa ttc gac tac aag gat gac gac gat aag tga		861	
Ile Lys Arg Arg Glu Phe Asp Tyr Lys Asp Asp Asp Asp Lys			
275	280	285	
<210> 184			
<211> 286			
<212> PRT			
<213> Homo sapiens			
<400> 184			
Met Lys Tyr Leu Leu Pro Thr Ala Ala Ala Gly Leu Leu Leu Ala			
1 5 10 15			
Ala Gln Pro Ala Met Ala Met Ala Gln Val Gln Leu Val Gln Ser Gly			
20 25 30			

Ala Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala
 35 40 45

Ser Gly Tyr Thr Phe Thr Gly Tyr Tyr Met His Trp Val Arg Gln Ala
 50 55 60

Pro Gly Gln Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly
 65 70 75 80

Gly Thr Lys Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg
 85 90 95

Asp Thr Ser Ile Ser Thr Ala Tyr Met Glu Leu Ser Arg Leu Arg Ser
 100 105 110

Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg Gly Tyr Asp Ile Leu Thr
 115 120 125

Gly Tyr Gly Trp Phe Asp Pro Trp Gly Gln Gly Thr Leu Val Thr Val
 130 135 140

Ser Ser Gly Gly Gly Ser Gly Gly Ser Gly Gly Gly Gly
 145 150 155 160

Ser Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu
 165 170 175

Gly Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr
 180 185 190

Ser Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly
 195 200 205

Gln Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly
 210 215 220

Val Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu
 225 230 235 240

Thr Ile Ser Thr Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln
 245 250 255

Gln Tyr Tyr Ser Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu
 260 265 270

Ile Lys Arg Arg Glu Phe Asp Tyr Lys Asp Asp Asp Asp Lys
 275 280 285

<210> 185
 <211> 846
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS

<222> (1)..(846)

<223>

<400> 185

atg aaa tac ctg ctg ccg acc gct gct gct ggt ctg ctg ctc ctc gct 48
 Met Lys Tyr Leu Leu Pro Thr Ala Ala Ala Gly Leu Leu Leu Leu Ala
 1 5 10 15

gcc cag ccg gcg atg gcc atg cag gtg cag ctg gtg cag tct ggg 96
 Ala Gln Pro Ala Met Ala Met Ala Gln Val Gln Leu Val Gln Ser Gly
 20 25 30

gct gag gtg aag aag cct ggg gcc tca gtg aag gtc tcc tgc aag gct 144
 Ala Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala
 35 40 45

tct gga tac acc ttc acc ggc tac tat atg cac tgg gtg cga cag gcc 192
 Ser Gly Tyr Thr Phe Thr Gly Tyr Tyr Met His Trp Val Arg Gln Ala
 50 55 60

cct gga caa ggg ctt gag tgg atg gga tgg atc aac cct aac agt ggt 240
 Pro Gly Gln Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly
 65 70 75 80

ggc aca aag tat gca cag aag ttt cag ggc agg gtc acc atg acc agg 288
 Gly Thr Lys Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg
 85 90 95

gac acg tcc atc agc aca gcc tac atg gag ctg agc agg ctg aga tct 336
 Asp Thr Ser Ile Ser Thr Ala Tyr Met Glu Leu Ser Arg Leu Arg Ser
 100 105 110

gac gac acg gcc gtg tat tac tgt gcg aga gga tac gat att ttg act 384
 Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg Gly Tyr Asp Ile Leu Thr
 115 120 125

ggt tat ggc tgg ttc gac ccc tgg ggc cag gga acc ctg gtc acc gtc 432
 Gly Tyr Gly Trp Phe Asp Pro Trp Gly Gln Gly Thr Leu Val Thr Val
 130 135 140

tcc tca ggt ggt ggt tcg ggt ggt ggt tcg ggt ggt ggc gga 480
 Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ser Gly Gly Gly Gly
 145 150 155 160

tcg gaa att gtg ctg act cag tct cca ggc acc ctg tct ttg tct cca 528
 Ser Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro
 165 170 175

ggg gaa aga gcc acc ctc tcc tgc aag gcc agt cag agt ttt agc agc 576
 Gly Glu Arg Ala Thr Leu Ser Cys Lys Ala Ser Gln Ser Phe Ser Ser
 180 185 190

aac tac tta gcc tgg tac cag cag aaa cct ggc cag gct ccc agg ctg 624
 Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu
 195 200 205

ctc atc tat ggt gca tcc agc agg gcc act ggc atc cca gac agg ttc 672

Leu Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe			
210	215	220	
agt ggc agt aaa tct ggg aca gac ttc act ctc acc atc agc aga ctg			720
Ser Gly Ser Lys Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu			
225	230	235	240
gag cct gaa gat ttt gca gtg tat tac tgt cag cag tat gtt acc tca			768
Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Val Thr Ser			
245	250	255	
ccg tac act ttt ggc cag ggg acc aag gtg gag atc aaa cgt cgt gaa			816
Pro Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Arg Glu			
260	265	270	
ttc gac tac aag gat gac gac gat aag tga			846
Phe Asp Tyr Lys Asp Asp Asp Asp Lys			
275	280		
<210> 186			
<211> 281			
<212> PRT			
<213> Homo sapiens			
<400> 186			
Met Lys Tyr Leu Leu Pro Thr Ala Ala Ala Gly Leu Leu Leu Ala			
1	5	10	15
Ala Gln Pro Ala Met Ala Met Ala Gln Val Gln Leu Val Gln Ser Gly			
20	25	30	
Ala Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala			
35	40	45	
Ser Gly Tyr Thr Phe Thr Gly Tyr Tyr Met His Trp Val Arg Gln Ala			
50	55	60	
Pro Gly Gln Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly			
65	70	75	80
Gly Thr Lys Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg			
85	90	95	
Asp Thr Ser Ile Ser Thr Ala Tyr Met Glu Leu Ser Arg Leu Arg Ser			
100	105	110	
Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg Gly Tyr Asp Ile Leu Thr			
115	120	125	
Gly Tyr Gly Trp Phe Asp Pro Trp Gly Gln Gly Thr Leu Val Thr Val			
130	135	140	
Ser Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly			
145	150	155	160
Ser Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro			

165

170

175

Gly Glu Arg Ala Thr Leu Ser Cys Lys Ala Ser Gln Ser Phe Ser Ser
 180 185 190

Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu
 195 200 205

Leu Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe
 210 215 220

Ser Gly Ser Lys Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu
 225 230 235 240

Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Val Thr Ser
 245 250 255

Pro Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Arg Glu
 260 265 270

Phe Asp Tyr Lys Asp Asp Asp Asp Lys
 275 280

<210> 187

<211> 852

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)..(852)

<223>

<400> 187

atg aaa tac ctg ctg ccg acc gct gct gct ggt ctg ctg ctc ctc gct 48
 Met Lys Tyr Leu Leu Pro Thr Ala Ala Gly Leu Leu Leu Leu Ala
 1 5 10 15

gcc cag ccg gcg atg gcc atg cag gtc cag ctg gtg caa tct ggg 96
 Ala Gln Pro Ala Met Ala Gln Val Gln Leu Val Gln Ser Gly
 20 25 30

gga ggc ttg gtc cag cct ggg tcc ctg aga ctc tcc tgt gca gcc 144
 Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala
 35 40 45

tct gga ttc acc ttt agt agc tat tgg atg agt tgg gtc cgc cag gct 192
 Ser Gly Phe Thr Phe Ser Ser Tyr Trp Met Ser Trp Val Arg Gln Ala
 50 55 60

cca ggg aag ggg ctg gag tgg gtg gcc aac ata aag caa gat gga agt 240
 Pro Gly Lys Gly Leu Glu Trp Val Ala Asn Ile Lys Gln Asp Gly Ser
 65 70 75 80

gag aaa tac tat gtg gac tct gtg aag ggc cga ttc acc atc tcc aga 288
 Glu Lys Tyr Tyr Val Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg

85 ,	90	95	
gac aac gcc aag aac tca ctg tat ctg caa atg aac acc ctg aga gcc Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln Met Asn Thr Leu Arg Ala 100	105	110	336
gag gac acg gct gtg tat tac tgt gcg aga gat cgt ttg tgg acc cag Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Asp Arg Leu Trp Thr Gln 115	120	125	384
ggg ttt ttt gac tac tgg ggc cag gga acc ctg gtc acc gtc tcc tca Gly Phe Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 130	135	140	432
ggt ggt ggt ggt tcg ggt ggt ggt tcg ggt ggt ggc gga tcg gac Gly Gly Gly Ser Gly Gly Ser Gly Gly Ser Gly Gly Ser Asp 145	150	155	480
atc gtg atg acc cag tct cca gac tcc ctg gct gtg tct ctg ggc gag Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu 165	170	175	528
agg gcc acc atc aac tgc aag tcc agc cag agt gtt tta tac agc tcc Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser Ser 180	185	190	576
aac aat aag aac tac tta gct tgg tac cag cag aaa cca gga cag cct Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Pro 195	200	205	624
cct aac ctg ctc att tac tgg gca tct acc cgg gaa tcc ggg gtc cct Pro Asn Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val Pro 210	215	220	672
gac cga ttc agt ggc agc ggg tct ggg aca gat ttc act ctc acc atc Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile 225	230	235	720
agc agc ctg cag gct gaa gat gtg gca gtt tat tac tgt cag caa tat Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr 245	250	255	768
tat act act ccg tgg acg ttc ggc caa ggg acc aag gtg gaa atc aaa Tyr Thr Thr Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys 260	265	270	816
cgt gaa ttc gac tac aag gat gac gac gat aag tga Arg Glu Phe Asp Tyr Lys Asp Asp Asp Lys 275	280		852

<210> 188
<211> 283
<212> PRT
<213> Homo sapiens

<400> 188

Met Lys Tyr Leu Leu Pro Thr Ala Ala Ala Gly Leu Leu Leu Ala
 1 5 10 15

Ala Gln Pro Ala Met Ala Met Ala Gln Val Gln Leu Val Gln Ser Gly
 20 25 30

Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala
 35 40 45

Ser Gly Phe Thr Phe Ser Ser Tyr Trp Met Ser Trp Val Arg Gln Ala
 50 55 60

Pro Gly Lys Gly Leu Glu Trp Val Ala Asn Ile Lys Gln Asp Gly Ser
 65 70 75 80

Glu Lys Tyr Tyr Val Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg
 85 90 95

Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln Met Asn Thr Leu Arg Ala
 100 105 110

Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Asp Arg Leu Trp Thr Gln
 115 120 125

Gly Phe Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 130 135 140

Gly Gly Gly Ser Gly Gly Ser Gly Gly Ser Asp
 145 150 155 160

Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu
 165 170 175

Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser Ser
 180 185 190

Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Pro
 195 200 205

Pro Asn Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val Pro
 210 215 220

Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
 225 230 235 240

Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr
 245 250 255

Tyr Thr Thr Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 260 265 270

Arg Glu Phe Asp Tyr Lys Asp Asp Asp Asp Lys
 275 280